Drinking Water Surveillance Program

BELLEVILLE WATER TREATMENT PLANT

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BELLEVILLE
WATER TREATMENT PLANT

DRINKING WATER SURVEILLANCE PROGRAM

ANNUAL REPORT 1988

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EXECUTIVE SUMMARY

DRINKING WATER SURVEILLANCE PROGRAM

BELLEVILLE WATER TREATMENT PLANT
1988 ANNUAL REPORT

The Drinking Water Surveillance Program (DWSP) for Ontario is a monitoring program providing immediate, reliable, current information on drinking water quality. The DWSP officially began in April 1986 and is designed to eventually include all municipal supplies in Ontario. Currently, 52 plants are being monitored.

The Belleville Water Treatment Plant is a conventional treatment plant that treats water from the Bay of Quinte. The treatment process consists of coagulation, flocculation, sedimentation, filtration, fluoridation and disinfection. This plant has a design capacity of 54 x 1000 m^3/day and serves a population of 37,000.

Water samples from the raw, treated and two distribution system sites were taken on a monthly basis. Sampling at distribution system Site 1 and Site 2 was discontinued in September and started again at Ste 3 and Site 4 in October. The Belleville Water Treatment Plant was sampled for approximately 160 parameters. Parameters were divided into the following groups Bacteriological, Inorganic and Physical(Laboratory Chemistry, Field Chemistry and Metals) and Organics (Chloroaromatics, Chlorophenols, Pesticides and PCB, Phenolics, Polynuclear Aromatic Hydrocarbons, Specific Pesticides and Volatiles). Specific Pesticides and Chlorophenols were analysed for in June and November only.

A summary of results is shown in Table 1.

Inorganic and Physical parameters (Laboratory Chemistry, Field Chemistry and Metals) were below any applicable health related ODWOs.

Of approximately 110 Organic parameters tested for on a monthly basis, none exceeded health related guidelines.

During 1988 the DWSP sampling results indicated that the Belleville Water Treatment Plant produced good quality water at the plant and this quality was maintained in the distribution system.

TABLE 1

DRINKING WATER SURVEILLANCE PROGRAM BELLEVILLE WTP

SUMMARY TABLE BY SCAN

SCAN	RAW			TREATED			SITE 1			SITE 3			SITE 2			SITE 4		
	TESTS	POSITIVE	%POSITIVE	TESTS	POSITIVE	%POSITIVE	TESTS	POSITIVE	%POSITIVE	TESTS	POSITIVE	%POSITIVE	TESTS	POSITIVE	%POSITIVE	TESTS	POSITIVE	%POSITIVE
BACTERIOLOGICAL	43	39	90	44	7	15	38	8	21	9	3	33	33	10	30	9	4	44
CHEMISTRY (FLD)	36	36	100	72	72	100	72	72	100	20	20	100	88	88	100	18	18	100
CHEMISTRY (LAB)	246	216	87	239	178	74	282	238	84	109	101	92	281	234	83	109	100	91
METALS	287	160	55	287	113	39	353	173	49	141	79	56	422	205	48	141	80	56
CHLOROAROMATICS	154	0	0	154	0	0	112	0	0	42	0	0	112	0	0	42	0	0
CHLOROPHENOLS	12	0	0	12	0	0	.	.	.	.	.	.	.	.	.	.	.	.
PAH	204	0	0	204	0	0	.	.	.	.	.	.	.	.	.	.	.	.
PESTICIDES & PCB	375	0	0	375	0	3	273	0	0	102	0	0	273	0	0	102	0	0
PHENOLICS	12	7	58	12	7	58	.	.	.	.	.	.	.	.	.	.	.	.
SPECIFIC PESTICIDES	56	0	0	56	0	0	0	0	0	0	0	0	0	0	0	0	0	0
VOLATILES	230	5	2	258	27	10	200	21	10	87	10	11	200	21	10	87	11	12
TOTAL	1655	463		1713	404		1330	512		510	213		1409	558		508	213	

NO HEALTH-RELATED GUIDELINES WERE EXCEEDED.

A POSITIVE VALUE DENOTES THAT THE RESULT IS GREATER THAN THE STATISTICAL LIMIT OF DETECTION AND IS QUANTIFIABLE
A '.' INDICATES THAT NO SAMPLE WAS TAKEN

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INTRODUCTION

The Drinking Water Surveillance Program (DWSP) for Ontario is a monitoring program providing immediate, reliable, current information on drinking water quality. The DWSP officially began in April 1986 and is designed to eventually include all municipal supplies in Ontario. Currently, 52 plants are being monitored.

The DWSP was initiated at the Belleville Water Treatment Plant in the spring of 1987. An Annual Report was published for 1987 (ISSN 0840-5123).

This report contains information and results for 1988.

PLANT DESCRIPTION

The Belleville Water Treatment Plant is a conventional treatment plant which treats water from the Bay of Quinte. The treatment process consists of coagulation, flocculation, sedimentation, filtration, fluoridation and disinfection. The plant has a design capacity of 54 x 1000 m^3/day and sample day flows ranging from 21 x 1000 m^3/day to 48 x 1000 m^3/day. This plant serves a population

of approximately 37,000.

The plant location is shown in Figure 1. Plant process details, in a block schematic, are shown in Figure 2. General plant information is presented in Table 2.

METHODS

Water samples were obtained from six DWSP approved locations;

i) Plant Raw - The water originated from the raw water well prior to chlorination and was sampled through a stainless steel line. The sample tap is located in the plant laboratory.

ii) Plant Treated - The water originated from the clearwell after addition of all treatment chemicals and was sampled through a stainless steel sample line. The sample tap is located in the plant laboratory.

iii) Distribution System - Site 1 - This house is approximately 3.1 kilometers from the plant. Water was sampled, through copper plumbing, from the basement laundry tap. Sampling was disctontinued in September.

iv) Distribution System - Site 2 - This house is approximately 8.8 kilometers from the plant. Water was sampled, through copper plumbing, from the basement laundry tap. Sampling was discontinued in

September.

v) Distribution System - Site 3 - This house is approximately 4.8 kilometers from the plant. Water was sampled, through copper plumbing, from the upstairs bathroom tap.

vi) Distribution System - Site 4 - This house is approximately 3.4 kilometers from the plant. Water was sampled, through copper plumbing, from the upstairs bathroom tap.

Sample lines in the plant were flushed prior to sampling to ensure that the water obtained was indicative of its origin and not residual water standing in the sample line.

At all distribution system locations two types of samples were obtained: a standing and a free flow. The standing sample consisted of water that had been in the household plumbing and service connection for a minimum of six hours. These samples are used to make an assessment of the amount by which the levels of inorganic compounds and metals may be changed on standing, due to leaching from (or deposition on) the plumbing system. The only analyses carried out on the standing samples therefore, were the General Chemistry and Metals scans. The free flow sample represented fresh water from the distribution main that had been flowing at the sample tap for five minutes before the sample was taken.

Attempts were made to capture the same block of water at each

FIGURE 1

DRINKING WATER SURVEILLANCE PROGRAM

SITE LOCATION MAP

BELLEVILLE WATER TREATMENT PLANT

FIGURE 2

BELLEVILLE WATER TREATMENT PLANT

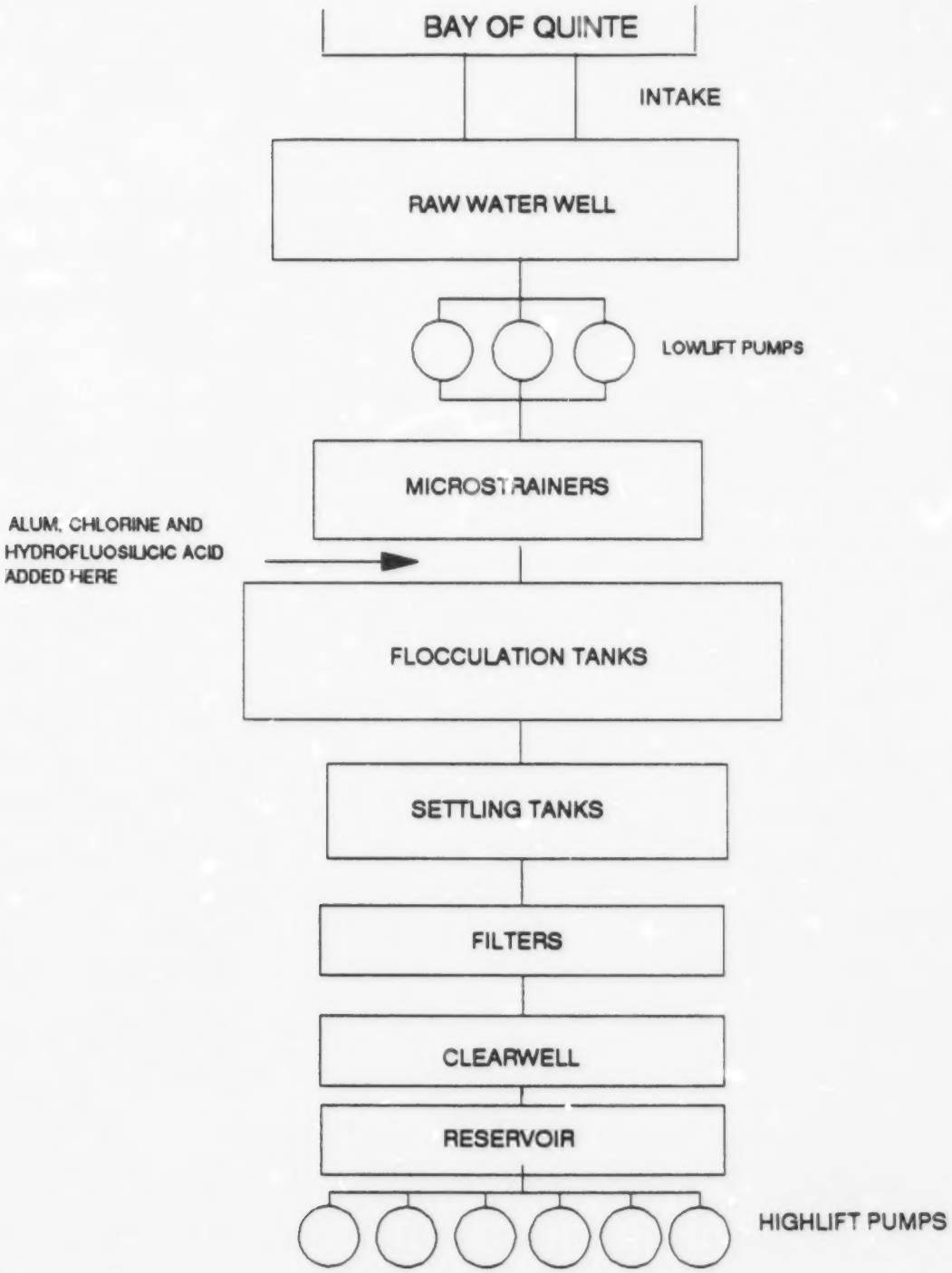

TABLE 2

DRINKING WATER SURVEILLANCE PROGRAM ANNUAL REPORT
GENERAL INFORMATION

BELLEVILLE WATER TREATMENT PLANT

LOCATION:	SIDNEY STREET BELLEVILLE, ONTARIO (613-966-3651)
SOURCE:	RAW WATER SOURCE - BAY OF QUINTE
DESIGN CAPACITY:	54.5 (1000 M^3/DAY)
OPERATION:	MUNICIPALITY
PLANT SUPERINTENDENT:	D. MIDDLETON
MINISTRY REGION:	SOUTHEASTERN
DISTRICT OFFICER:	J. PRUNER

MUNICIPALITY SERVED	POPULATION
BELLEVILLE	36,720

sampling point by taking the retention time into consideration. The retention time was calculated by dividing the volume of water between the two sampling points by the sample day flow. For example, if it was determined that the retention time within the plant was five hours then there would be a five hour interval between the raw and treated sampling. Similarly, if it was estimated that it took approximately one day for the water to travel from the plant to the distribution system site, this site would be sampled one day after the treated water from the plant.

Stringent DWSP sampling protocols were followed to ensure that all samples were taken in a uniform manner.

Sample day flow, treatment chemical dosages and Field Chemistry measurements such as Turbidity, Chlorine Residuals, pH and Temperature were recorded on the day of sampling and were entered onto the DWSP data base as submitted.

RESULTS

Water at the Belleville Water Treatment Plant was sampled for approximately 160 parameters on a monthly basis 12 times in 1988. The Specific Pesticides and Chlorophenols scans were sampled for in June and November only. Polynuclear Aromatic Hydrocarbons and Phenolics are only analysed for in the raw and treated water at the plant. As a result of an unforeseen emergency the laboratory capacity was exceeded and analysis for volatiles could not be

carried out when the samples were received. Since analysis for volatiles is no longer valid after four weeks of storage, volatile results for February and March are not available.

Table 3 contains information on the sample day retention time, flow rate and treatment chemicals used and their associated dosages.

Table 4 is a summary break-down of the number of water samples analysed by parameter and by water type. The number of times that a positive or trace result was detected is also reported.
Positive denotes that the result is greater than the statistical limit of detection established by the Ministry of the Environment (MOE) laboratory staff and is quantifiable. Trace (<T) denotes that the level measured is greater than the lowest value detectable by the method but lies so close to the detection limit that it cannot be confidently quantified.

Table 5 presents the results for parameters detected on at least one occasion.

Table 6 lists all parameters analysed in the DWSP.

Associated guidelines and detection limits are also supplied on tables 5 and 6. Parameters are listed alphabetically within each scan.

DISCUSSION

General

Water quality is judged by comparison with the Ontario Drinking Water Objectives (ODWOs) as defined in the 1984 publication (ISBN 0-7743-8985-0). The Province of Ontario has health related and aesthetic objectives for 49 parameters. These are currently under review. When an ODWO is not available guidelines/limits from other agencies are consulted. The Parameters Listing System (PALIS) recently published (ISBN 0-7729-4461-X) by the MOE catalogues and keeps current over 1750 guidelines for 650 parameters from agencies throughout the world.

Although some of the parameters measured on DWSP may be present in the raw and treated water as a result of pollution, many of the compounds detected are naturally occuring or are treatment by-products.

Plant operational personnel address occurrences of taste and odour or biological water quality parameters. The DWSP does not assess these aspects of the water supply.

As stated under Results, traces do not indicate quantifiable values, as defined by established MOE Laboratory analytical reporting protocols. While they can be useful in trend analysis or confirmation of the presence of a specific contaminant that is repeatedly detected at these levels, the occasional finding of a

trace level of a contaminant is not considered to be significant. **DISCUSSION OF GUIDELINES AND LIMITS THEREFORE, IS ONLY CONDUCTED ON POSITIVE RESULTS.**

Bacteriology

Positive results for the Bacteriology scan were present seven times in the treated water, eight times in the Site 1 water, ten times in the Site 2 water, three times in the Site 3 water and four times in the Site 4 water. The positive parameters were Standard Plate Count, Total Coliform and/or Total Coliform Background.

Standard Plate Count is a test used to supplement routine analysis for Coliform bacteria. The limit for Standard Plate Count (at 35°C after 48 hours) in the ODWOs is 500 organisms per mL (based on a geometric mean of 5 or more samples). High Standard Plate Counts were present in the November and December Site 3 water samples. While no indicators of unsafe water were detected at this time, the high Standard Plate Count may be indicative of a deterioration in conditions in the distribution system. A total Chlorine Residual of at least 0.05 mg/L was detected in the Site 3 samples for those months. No samples contained bacteriological results over any applicable health related ODWOs.

Guidelines for bacteriological sampling and testing of a supply are developed to maintain a proper supervision of its bacteriological quality; the routine monitoring program usually requires the taking

of multiple samples in a given system. Full interpretation of bacteriological quality cannot be made on the basis of single samples. Further, bacteriological limits were developed in acknowledgement that the presence of coliforms may be detected due to their non-uniform distribution throughout the distribution system and the fact that their enumeration is subject to considerable variation. Routine bacteriological monitoring, as outlined in the ODWOs is carried out by the operating authority.

Inorganic and Physical Parameters

Laboratory and Field Chemistry

The results for the Laboratory Chemistry and Field Chemistry scans were below all health related ODWOs.

Colour was above the aesthetic ODWO of 5.00 True Colour Units (TCU) once in a free flow sample from Site 1. Colour in drinking water may be due to the presence of natural or synthetic organic substances as well as certain metallic ions.

As part of the treatment process, Fluosilic Acid is added to the treated water (Table 3). Where fluoridation is practiced, the fluoride concentration recommended in the ODWO is 1.2 mg/L, plus or minus 0.2 mg/L. Hydrofluosilicic acid was not added in May due to equipment failure. Maintenance of the recommended level can be observed in all other treated and distribution samples.

The Langelier Index is used extensively in estimating the corrosion potential of water. An increasingly negative index indicates the increasing possibility of corrosion. It is considered sound engineering practice to maintain a slightly positive Langelier Index. The Langelier Index for Belleville is not consistent, varying from negative to positive.

It is desirable that the Temperature of drinking water be less than 15°C; the palatability of water is enhanced by its coolness. A temperature below 15°C will tend to reduce the growth of nuisance organisms and hence minimize associated taste, colour, odour and corrosion problems. The temperature of the delivered water may increase in the distribution system due to the warming effect of the soil in late summer and fall and/or as a result of higher temperatures in the source water. The desired ODWO was exceeded sixteen times in the treated water and free flow distributed water.

Metals

The results reported for the Metal scan were all below any health related ODWOs.

Copper, Iron, Lead, Uranium, Manganese and Zinc levels were lower in the treated water as compared to the raw water. This is a result of the treatment process. The addition of Alum as a coagulant to the raw water and the resulting coagulation/settling process has been shown to reduce the levels of most metals.

Elevated levels of Copper, Nickel, Lead and Zinc were detected in the standing samples as compared to the free flow distribution samples thus, indicating that these metals were leached from the household plumbing as the water stood overnight. Although the Langelier Index indicates minimal potential for corrosion some metals will be leached in standing samples in most supplies.

At present, there is no evidence that Aluminum is physiologically harmful and no health limit for drinking water has been specified. The measure of residual Aluminum in the treated water is important to indicate the efficiency of the treatment process. The ODWOs indicate that a useful guideline is to maintain a residual below 100 ug/L as Al in the water leaving the plant to avoid problems in the distribution system. Aluminum values exceeded the ODWO operational guideline eleven times in the treated water.

Organic Parameters

Chloroaromatics

The results of the Chloroaromatics scan showed that one parameter was detected:

Hexachloroethane

Hexachloroethane was detected at trace levels, once in both the treated water and the Site 4 water.

Review of these results, along with information from other water

supplies on DWSP, would indicate that certain Chloroaromatics appear more frequently in the treated water and distribution system water than in the raw and almost always only at trace levels. These occurrences could possibly be due to a reaction of chlorine with organics present in the water or the distribution system.

Chlorophenols

The results of the Chlorophenols scan showed that one Chlorophenol was detected:

Pentachlorophenol

Pentachlorophenol was detected at a trace level, once in the raw water.

Pesticides and PCB (Polychlorinated Biphenyls)

The results of the Pesticides and PCB scan showed that no PCBs were detected and that three pesticides were detected:

Alpha BHC

Lindane

Atrazine

There are several isomers of BHC (Benzene Hexachloride); gamma BHC is the active ingredient of the pesticide Lindane, while alpha BHC is the isomer most predominantly found in surface waters in the Great Lakes Basin as indicated in results from other water supplies on DWSP.

Alpha BHC was detected at trace levels, three times in the raw water, six times in the treated water, four times in the Site 1 and 2 water, three times in the Site 3 water and once in the Site 4 water.

Lindane was detected at trace levels, once in the raw water, twice in the treated water, once in each of the Site 1, Site 2 , Site 3 and Site 4 water samples.

Atrazine was detected at trace levels, in the April samples of the treated water, Site 1 and Site 2 water.

Specific Pesticides

Results of the Specific Pesticides scan showed that no parameters were detected.

Phenolics

The maximum desirable concentration of phenolic substances in drinking water is 2.0 ug/L. This limit has been set primarily to prevent the occurrence of undesirable tastes and odours, particularly in chlorinated water. Phenolics were detected at 2.2 ug/L and 2.6 ug/L in the May raw and treated waters, 2.8 and 2.2 ug/L in June, 1.6 and 2.0 ug/L in July, 1.6 and 2.8 ug/L in August, 5.0 and 2.6 ug/L in October, 2.8 and 2.4 ug/L in Novemeber and 2.0 and 1.6 ug/L in December. Phenolics were detected at trace levels, seven times in the raw and treated water. Phenolic compounds are present in the aquatic environment as a result of natural and/or

industrial processes.

Polynuclear Aromatic Hydrocarbons (PAH)

The results of the PAH scan showed that no PAHs were detected.

Volatiles

The results of the Volatiles scan showed that ten parameters, other than Trihalomethanes(THMs), were detected:

- Benzene
- Toluene
- Ethylbenzene
- Meta-Xylene
- Ortho-Xylene
- Styrene
- 1,1-Dichloroethane
- 1,1,1-Trihloroethane
- 1,2-Dichloroethane
- Tetrachloroethylene

Benzene was detected at a trace level, in one raw water sample.

Toluene was detected at trace levels, three times in the treated water, twice in the Site 1 water and three times in the Site 3 water. The detection of toluene at low, trace levels is a laboratory artifact derived from the analytical methodology. The purge-and-trap analytical technique depends on the purging of the volatile organics in the water sample with helium gas onto a Tenax

trapping column. The volatile materials are subsequently thermally desorbed, separated and quantified. Tenax, a toluene-like polymeric material, tends to decompose sporadically upon heating into toluene and other aromatic componenets (ethylbenzene and xylene) giving instrument blanks in the order of 0.05 ug/L.

The detected trace levels of Styrene are also considered to be laboratory artifacts due to the outgassing of monomeric styrene from the polystyrene shipping containers. The sporadic background levels from this source are in the order of 0.05 ug/L.

Styrene was also detected at 0.50 ug/L in the October Site 3 water and 0.90 ug/L in the Site 4 water. The United States Environmental Protection Agency's proposed Maximum Contaminant Level (MCLG) for styrene in drinking water is 140 ug/L.

Ethylbenzene was detected at a trace level, once in the raw water, seven times in the treated water, twice in the Site 1 water and once at each of the other three distributed water sites.

Meta-Xylene (M-Xylene) was detected at trace levels, once in the treated water, Site 1 and Site 2 water samples.

Ortho-Xylene was detected at trace levels, once in the raw water, twice in the treated water and once in the Site 2 water.

The volatiles listed above are typically found on an occasional

basis at other water supplies included on the DWSP, usually at trace levels.

1,1-Dichloroethane was detected at a trace level, once in the Site 1 water.

1,1,1-Trichloroethane was detected at a trace level, once in the raw water.

1,2-Dichloroethane was detected at trace levels, once in the treated water, twice in the Site 1 water and once in the Site 2 water.

Tetrachloroethylene was detected at trace levels, once in the treated water, Site 2 water, Site 3 water and Site 4 water samples.

THMs are acknowledged to be produced during the water treatment process and will always occur in chlorinated surface waters. THMs are comprised of Chloroform, Chlorodibromomethane and Dichlorobromomethane. Bromoform occurs occasionally. Results are reported for the individual compounds as well as for total THMs.

Chloroform, Dichlorobromomethane and Total THMs were detected in all treated water and distributed water samples. Chlorodibromomethane was detected at trace levels in most treated waters and distributed waters. All Total THM occurrences, ranging from 66.9 to 173.9 ug/L, were well below the ODWO of 350 ug/L.

THMs were present at very low levels in four of the raw water samples. This would indicate that low levels of chlorine were present in these samples.

CONCLUSIONS

The Belleville Water Treatment plant for the sample year of 1988 produced good quality water at the plant and this was maintained in the distribution system.

No health related guidelines, for organic or inorganic parameters, were exceeded during 1987 or 1988.

RECOMMENDATIONS

One recommendation can be made:

1) During 1988 four raw water samples contained low levels of THMs. This sample site should be reassessed to ensure that it still meets the DWSP sampling protocol.

TABLE 3

DRINKING WATER SURVEILLANCE PROGRAM BELLEVILLE WTP SAMPLE DAY CONDITIONS FOR 1988

	SAMPLE DAY CONDITIONS		TREATMENT CHEMICAL DOSAGES (MG/L)		
			PRE-CHLORINATION	COAGULATION	FLUORIDATION
			CHLORINE	ALUM LIQUID	HYDROFLUOSILICIC ACID
DATE	RETENTION TIME(HRS)	FLOW (1000M3)			
JAN 05	4.0	25.5	2.75	35.00	1.20
FEB 02	4.0	27.3	3.10	26.50	1.14
MAR 08	4.0	27.3	3.25	27.50	1.22
APR 06	4.0	25.0	3.50	39.00	1.31
MAY 03	4.5	27.0	3.40	36.00	.
JUN 07	3.2	36.0	4.20	35.50	1.24
JUL 05	4.0	40.5	5.30	38.00	1.30
AUG 03	4.0	36.5	5.60	42.00	1.28
SEP 07	4.0	29.5	5.30	42.00	1.33
OCT 04	3.0	27.0	4.30	41.50	1.31
NOV 08	4.0	27.0	3.85	44.00	1.33
DEC 06	3.5	26.8	3.30	35.00	1.38

TABLE 4

DRINKING WATER SURVEILLANCE PROGRAM BELLEVILLE

SUMMARY TABLE OF RESULTS (1988)

		RAW			TREATED			SITE 1			SITE 3			SITE 2			SITE 4		
SCAN	PARAMETER	TOTAL	POSITIVE	TRACE	TOTAL	POSITIVE	TRACE	TOTAL	POSITIVE	TRACE	TOTAL	POSITIVE	TRACE	TOTAL	POSITIVE	TRACE	TOTAL	POSITIVE	TRACE
BACTERIOLOGICAL	AEROMONAS SP	.	.	.	.	.	.	1	0	0	.	.	.	.	.	.	.	.	.
	E. COLI P/A	.	.	.	.	.	.	1	0	0	.	.	.	.	.	.	.	.	.
	FECAL COLIFORM MF	12	8	0	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	FECAL COLIFORM	.	.	.	.	.	.	1	0	0	.	.	.	.	.	.	.	.	.
	STANDRD PLATE CNT MF	7	7	0	12	6	0	7	5	0	3	2	0	7	6	0	3	2	0
	P/A BOTTLE	.	.	.	8	0	0	8	1	0	.	.	.	8	0	0	.	.	.
	STAPH AUREUS	.	.	.	.	.	.	1	0	0	.	.	.	.	.	.	.	.	.
	COLIFORM	.	.	.	.	.	.	1	0	0	.	.	.	.	.	.	.	.	.
	TOTAL COLIFORM MF	12	12	0	12	0	0	9	0	0	3	0	0	9	0	0	3	0	0
	T COLIFORM BCKGRD MF	12	12	0	12	1	0	9	2	0	3	1	0	9	4	0	3	2	0
*TOTAL SCAN BACTERIOLOGICAL		43	39	0	44	7	0	38	8	0	9	3	0	33	10	0	9	4	0
*TOTAL GROUP BACTERIOLOGICAL		43	39	0	44	7	0	38	8	0	9	3	0	33	10	0	9	4	0
CHEMISTRY (FLD)	FLD CHLORINE (COMB)	.	.	.	12	12	0	10	10	0	2	2	0	16	16	0	4	4	0
	FLD CHLORINE FREE	.	.	.	12	12	0	14	14	0	2	2	0	18	18	0	2	2	0
	FLD CHLORINE (TOTAL)	.	.	.	12	12	0	17	17	0	4	4	0	18	18	0	4	4	0
	FLD PH	12	12	0	12	12	0	14	14	0	6	6	0	18	18	0	4	4	0
	FLD TEMPERATURE	12	12	0	12	12	0	17	17	0	4	4	0	18	18	0	4	4	0
	FLD TURBIDITY	12	12	0	12	12	0	.	.	.	.	.	.	.	.	.	.	.	.
*TOTAL SCAN CHEMISTRY (FLD)		36	36	0	72	72	0	72	72	0	20	20	0	88	88	0	18	18	0
CHEMISTRY (LAB)	ALKALINITY	12	12	0	12	12	0	16	16	0	6	6	0	16	16	0	4	4	0

SCAN	PARAMETER	SITE	RAW			TREATED			SITE 1			SITE 3			SITE 2			SITE 4		
		TOTAL	POSITIVE	TRACE	TOTAL	POSITIVE	TRACE	TOTAL	POSITIVE	TRACE	TOTAL	POSITIVE	TRACE	TOTAL	POSITIVE	TRACE	TOTAL	POSITIVE	TRACE
CHEMISTRY (LAB)	CALCIUM	12	12	0	12	12	0	16	16	0	6	6	0	16	16	0	6	6	0
	CYANIDE	12	0	0	12	0	0	9	0	1	3	0	0	9	0	1	3	0	0
	CHLORIDE	12	12	0	12	12	0	16	16	0	6	6	0	16	16	0	6	6	0
	COLOUR	12	12	0	12	9	3	16	16	0	6	6	0	16	16	0	6	6	0
	CONDUCTIVITY	12	12	0	12	12	0	16	16	0	6	6	0	16	16	0	6	6	0
	FLUORIDE	12	12	0	12	12	0	16	16	0	6	6	0	16	16	0	6	6	0
	HARDNESS	12	12	0	12	12	0	16	16	0	6	6	0	16	16	0	6	6	0
	IONCAL	12	5	0	12	5	0	18	4	0	6	6	0	18	4	0	6	6	0
	LANGELIERS INDEX	12	12	0	5	5	0	9	9	0	4	4	0	8	8	0	4	4	0
	MAGNESIUM	12	12	0	12	12	0	16	16	0	6	6	0	16	16	0	6	6	0
	SODIUM	12	12	0	12	12	0	16	16	0	6	6	0	16	16	0	6	6	0
	AMMONIUM TOTAL	12	11	1	12	11	1	16	16	0	6	6	0	16	16	0	6	6	0
	NITRITE	12	12	0	12	1	10	16	0	15	6	2	4	16	0	16	6	2	4
	TOTAL NITRATES	12	8	3	12	8	2	16	11	2	6	5	1	16	8	6	6	4	2
	NITROGEN TOT KJELD	12	12	0	12	12	0	16	16	0	6	6	0	16	16	0	6	6	0
	PH	12	12	0	12	12	0	16	16	0	6	6	0	16	16	0	6	6	0
	PHOSPHORUS FIL REACT	12	6	6	12	0	11	.	.	.	.	.	.	.	.	.	.	.	.
	PHOSPHORUS TOTAL	12	12	0	12	2	7	.	.	.	.	.	.	.	.	.	.	.	.
	TOTAL SOLIDS	1	1	0	1	1	0	2	2	0	.	.	.	2	2	0	.	.	.
	SULPHATE	5	5	0	5	5	0	4	4	0	6	6	0	4	4	0	6	6	0
	TURBIDITY	12	12	0	12	11	1	16	16	0	6	6	0	16	16	0	6	6	0
*TOTAL SCAN CHEMISTRY (LAB)		246	216	10	239	178	35	282	238	18	100	101	5	281	234	23	100	100	6
METALS	SILVER	12	0	1	12	0	3	15	1	7	6	0	2	18	3	8	6	0	1
	ALUMINUM	12	12	0	12	12	0	15	15	0	6	6	0	18	18	0	6	6	0
	ARSENIC	12	5	6	12	0	9	15	0	12	4	0	6	18	0	13	6	0	6
	BARIUM	12	12	0	12	12	0	15	15	0	6	6	0	18	18	0	6	6	0
	BORON	11	7	4	11	7	4	15	6	9	6	5	1	18	4	14	6	6	0
	BERYLLIUM	12	0	10	12	0	7	15	0	6	6	0	5	18	0	1	6	0	5
	CADMIUM	12	2	10	12	0	1	15	0	7	6	0	1	18	0	6	6	0	2

SITE		RAW			TREATED			SITE 1			SITE 3			SITE 2			SITE 4		
GCMS	PARAMETER	TOTAL	POSITIVE	TRACE	TOTAL	POSITIVE	TRACE	TOTAL	POSITIVE	TRACE	TOTAL	POSITIVE	TRACE	TOTAL	POSITIVE	TRACE	TOTAL	POSITIVE	TRACE
METALS	COBALT	12	0	11	12	0	10	15	1	14	6	1	5	18	0	16	6	0	6
	CHROMIUM	12	9	3	12	8	3	15	4	10	6	5	1	18	4	14	6	6	0
	COPPER	12	12	0	12	1	11	15	15	0	6	6	0	18	18	0	6	6	0
	IRON	12	11	1	12	0	10	15	8	7	6	5	1	18	9	9	6	4	2
	MERCURY	12	5	1	12	5	0	8	3	4	3	0	3	8	3	2	3	0	1
	MANGANESE	12	12	0	12	12	0	15	15	0	6	6	0	18	18	0	6	6	0
	MOLYBDENUM	12	0	12	12	3	9	15	1	14	6	4	2	18	1	17	6	2	4
	NICKEL	12	2	7	12	1	8	15	7	6	6	3	2	18	10	7	6	3	2
	LEAD	12	12	0	12	0	10	15	15	0	6	3	3	18	17	1	6	5	1
	ANTIMONY	12	5	7	12	5	7	15	4	11	6	6	0	18	4	14	6	6	0
	SELENIUM	12	0	11	12	0	10	15	0	15	6	0	6	18	0	18	6	0	6
	STRONTIUM	12	12	0	12	12	0	15	15	0	6	6	0	18	18	0	6	6	0
	TITANIUM	12	12	0	12	11	1	15	15	0	6	5	1	18	18	0	6	6	0
	THALLIUM	12	0	5	12	0	2	15	0	5	6	0	0	18	0	3	6	0	0
	URANIUM	12	12	0	12	3	9	15	4	11	6	0	6	18	6	12	6	0	6
	VANADIUM	12	6	6	12	11	1	15	14	1	6	6	0	18	18	0	6	6	0
	ZINC	12	12	0	12	10	2	15	15	0	6	6	0	18	18	0	6	6	0
*TOTAL GCMS METALS		287	160	95	287	113	117	353	173	139	141	79	45	422	205	155	141	80	42
*TOTAL GROUP INORGANIC & PHYSICAL		569	412	105	599	363	152	797	485	157	270	208	50	791	527	178	268	198	48
CHLORINATED	HEXACHLOROBUTADIENE	11	0	0	11	0	0	8	0	0	3	0	0	8	0	0	3	0	0
	123 TRICHLOROBENZENE	11	0	0	11	0	0	8	0	0	3	0	0	8	0	0	3	0	0
	1234 T-CHLOROBENZENE	11	0	0	11	0	0	8	0	0	3	0	0	8	0	0	3	0	0
	1235 T-CHLOROBENZENE	11	0	0	11	0	0	8	0	0	3	0	0	8	0	0	3	0	0
	124 TRICHLOROBENZENE	11	0	0	11	0	0	8	0	0	3	0	0	8	0	0	3	0	0
	1245 T-CHLOROBENZENE	11	0	0	11	0	0	8	0	0	3	0	0	8	0	0	3	0	0
	135 TRICHLOROBENZENE	11	0	0	11	0	0	8	0	0	3	0	0	8	0	0	3	0	0
	HCB	11	0	0	11	0	0	8	0	0	3	0	0	8	0	0	3	0	0
	HEXACHLOROETHANE	11	0	0	11	0	1	8	0	0	3	0	0	8	0	0	3	0	1
	OCTACHLOROSTYRENE	11	0	0	11	0	0	8	0	0	3	0	0	8	0	0	3	0	0

SCAN	PARAMETER	SITE RAW TOTAL	RAW POSITIVE	RAW TRACE	TREATED TOTAL	TREATED POSITIVE	TREATED TRACE	SITE 1 TOTAL	SITE 1 POSITIVE	SITE 1 TRACE	SITE 3 TOTAL	SITE 3 POSITIVE	SITE 3 TRACE	SITE 2 TOTAL	SITE 2 POSITIVE	SITE 2 TRACE	SITE 4 TOTAL	SITE 4 POSITIVE	SITE 4 TRACE
CHLOROAROMATICS	PENTACHLOROBENZENE	11	0	0	11	0	0	8	0	0	3	0	0	8	0	0	3	0	0
	236 TRICHLOROTOLUENE	11	0	0	11	0	0	8	0	0	3	0	0	8	0	0	3	0	0
	245 TRICHLOROTOLUENE	11	0	0	11	0	0	8	0	0	3	0	0	8	0	0	3	0	0
	26A TRICHLOROTOLUENE	11	0	0	11	0	0	8	0	0	3	0	0	8	0	0	3	0	0
*TOTAL SCAN CHLOROAROMATICS		154	0	0	154	0	1	112	0	0	42	0	0	112	0	0	42	0	1
CHLOROPHENOLS	234 TRICHLOROPHENOL	2	0	0	2	0	0	.	.	.	.	.	.	.	.	.	.	.	.
	2345 T-CHLOROPHENOL	2	0	0	2	0	0	.	.	.	.	.	.	.	.	.	.	.	.
	2356 T-CHLOROPHENOL	2	0	0	2	0	0	.	.	.	.	.	.	.	.	.	.	.	.
	245-TRICHLOROPHENOL	2	0	0	2	0	0	.	.	.	.	.	.	.	.	.	.	.	.
	246-TRICHLOROPHENOL	2	0	0	2	0	0	.	.	.	.	.	.	.	.	.	.	.	.
	PENTACHLOROPHENOL	2	0	1	2	0	0	.	.	.	.	.	.	.	.	.	.	.	.
*TOTAL SCAN CHLOROPHENOLS		12	0	1	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PAH	PHENANTHRENE	12	0	0	12	0	0	.	.	.	.	.	.	.	.	.	.	.	.
	ANTHRACENE	12	0	0	12	0	0	.	.	.	.	.	.	.	.	.	.	.	.
	FLUORANTHENE	12	0	0	12	0	0	.	.	.	.	.	.	.	.	.	.	.	.
	PYRENE	12	0	0	12	0	0	.	.	.	.	.	.	.	.	.	.	.	.
	BENZO(A)ANTHRACENE	12	0	0	12	0	0	.	.	.	.	.	.	.	.	.	.	.	.
	CHRYSENE	12	0	0	12	0	0	.	.	.	.	.	.	.	.	.	.	.	.
	DIMETH. BENZ(A)ANTHR	12	0	0	12	0	0	.	.	.	.	.	.	.	.	.	.	.	.
	BENZO(E) PYRENE	12	0	0	12	0	0	.	.	.	.	.	.	.	.	.	.	.	.
	BENZO(J) FLUORANTHEN	0	0	0	0	0	0	.	.	.	.	.	.	.	.	.	.	.	.
	BENZO(B) FLUORANTHEN	12	0	0	12	0	0	.	.	.	.	.	.	.	.	.	.	.	.
	PERYLENE	12	0	0	12	0	0	.	.	.	.	.	.	.	.	.	.	.	.
	BENZO(K) FLUORANTHEN	12	0	0	12	0	0	.	.	.	.	.	.	.	.	.	.	.	.
	BENZO(A) PYRENE	12	0	0	12	0	0	.	.	.	.	.	.	.	.	.	.	.	.
	BENZO(G,H,I) PERYLEN	12	0	0	12	0	0	.	.	.	.	.	.	.	.	.	.	.	.

SCAN	PARAMETER	SITE RAW TOTAL	RAW POSITIVE	RAW TRACE	TREATED TOTAL	TREATED POSITIVE	TREATED TRACE	SITE 1 TOTAL	SITE 1 POSITIVE	SITE 1 TRACE	SITE 3 TOTAL	SITE 3 POSITIVE	SITE 3 TRACE	SITE 2 TOTAL	SITE 2 POSITIVE	SITE 2 TRACE	SITE 4 TOTAL	SITE 4 POSITIVE	SITE 4 TRACE
PAH	DIBENZO(A,H) ANTHRAC	12	0	0	12	0	0	.	.	.	.	.	.	.	.	.	.	.	.
	INDENO(1,2,3-C,D) PY	12	0	0	12	0	0	.	.	.	.	.	.	.	.	.	.	.	.
	BENZO(B) CHRYSENE	12	0	0	12	0	0	.	.	.	.	.	.	.	.	.	.	.	.
	ANTHANTHRENE	0	0	0	0	0	0	.	.	.	.	.	.	.	.	.	.	.	.
	CORONENE	12	0	0	12	0	0	.	.	.	.	.	.	.	.	.	.	.	.
*TOTAL SCAN PAH		204	0	0	204	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PESTICIDES & PCB	ALDRIN	11	0	0	11	0	0	8	0	0	3	0	0	8	0	0	3	0	0
	ALPHA BHC	11	0	3	11	0	6	8	0	4	3	0	3	8	0	4	3	0	1
	BETA BHC	11	0	0	11	0	0	8	0	0	3	0	0	8	0	0	3	0	0
	LINDANE	11	0	1	11	0	2	8	0	1	3	0	1	8	0	1	3	0	1
	ALPHA CHLORDANE	11	0	0	11	0	0	8	0	0	3	0	0	8	0	0	3	0	0
	GAMMA CHLORDANE	11	0	0	11	0	0	8	0	0	3	0	0	8	0	0	3	0	0
	DIELDRIN	11	0	0	11	0	0	8	0	0	3	0	0	8	0	0	3	0	0
	METHOXYCHLOR	11	0	0	11	0	0	8	0	0	3	0	0	8	0	0	3	0	0
	ENDOSULFAN I	11	0	0	11	0	0	8	0	0	3	0	0	8	0	0	3	0	0
	ENDOSULFAN II	11	0	0	11	0	0	8	0	0	3	0	0	8	0	0	3	0	0
	ENDRIN	11	0	0	11	0	0	8	0	0	3	0	0	8	0	0	3	0	0
	ENDOSULFAN SULPHATE	11	0	0	11	0	0	8	0	0	3	0	0	8	0	0	3	0	0
	HEPTACHLOR EPOXIDE	11	0	0	11	0	0	8	0	0	3	0	0	8	0	0	3	0	0
	HEPTACHLOR	11	0	0	11	0	0	8	0	0	3	0	0	8	0	0	3	0	0
	MIREX	11	0	0	11	0	0	8	0	0	3	0	0	8	0	0	3	0	0
	OXYCHLORDANE	11	0	0	11	0	0	8	0	0	3	0	0	8	0	0	3	0	0
	OPDDT	11	0	0	11	0	0	8	0	0	3	0	0	8	0	0	3	0	0
	PCB	11	0	0	11	0	0	8	0	0	3	0	0	8	0	0	3	0	0
	DDD	11	0	0	11	0	0	8	0	0	3	0	0	8	0	0	3	0	0
	PPDDE	11	0	0	11	0	0	8	0	0	3	0	0	8	0	0	3	0	0
	PPDDT	11	0	0	11	0	0	8	0	0	3	0	0	8	0	0	3	0	0
	AMETRINE	12	0	0	12	0	0	9	0	0	3	0	0	9	0	0	3	0	0
	ATRAZINE	12	0	1	12	0	1	9	0	1	3	0	0	9	0	1	3	0	0

SCAN	PARAMETER	SITE RAW TOTAL	RAW POSITIVE	RAW TRACE	TREATED TOTAL	TREATED POSITIVE	TREATED TRACE	SITE 1 TOTAL	SITE 1 POSITIVE	SITE 1 TRACE	SITE 3 TOTAL	SITE 3 POSITIVE	SITE 3 TRACE	SITE 2 TOTAL	SITE 2 POSITIVE	SITE 2 TRACE	SITE 4 TOTAL	SITE 4 POSITIVE	SITE 4 TRACE
PESTICIDES & PCB	ATRATONE	12	0	0	12	0	0	9	0	0	3	0	0	9	0	0	3	0	0
	CYANAZINE	12	0	0	12	0	0	9	0	0	3	0	0	9	0	0	3	0	0
	DES ETHYL ATRAZINE	6	0	0	6	0	0	3	0	0	3	0	0	3	0	0	3	0	0
	DES ETHYL SIMAZINE	6	0	0	6	0	0	3	0	0	3	0	0	3	0	0	3	0	0
	PROMETONE	12	0	0	12	0	0	9	0	0	3	0	0	9	0	0	3	0	0
	PROPAZINE	12	0	0	12	0	0	9	0	0	3	0	0	9	0	0	3	0	0
	PROMETRYNE	12	0	0	12	0	0	9	0	0	3	0	0	9	0	0	3	0	0
	METRIBUZIN	12	0	0	12	0	0	9	0	0	3	0	0	9	0	0	3	0	0
	SIMAZINE	12	0	0	12	0	0	9	0	0	3	0	0	9	0	0	3	0	0
	ALACHLOR	12	0	0	12	0	0	9	0	0	3	0	0	9	0	0	3	0	0
	METOLACHLOR	12	0	0	12	0	0	9	0	0	3	0	0	9	0	0	3	0	0
*TOTAL SCAN PESTICIDES & PCB		375	0	5	375	0	9	273	0	6	102	0	4	273	0	6	102	0	2
PHENOLICS	PHENOLICS	12	7	2	12	7	2	.	.	.	.	.	.	.	.	.	.	.	.
*TOTAL SCAN PHENOLICS		12	7	2	12	7	2	0	0	0	0	0	0	0	0	0	0	0	0
SPECIFIC PESTICIDES	TOXAPHENE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2,4,5-T	2	0	0	2	0	0	.	.	.	.	.	.	.	.	.	.	.	.
	2,4-D	2	0	0	2	0	0	.	.	.	.	.	.	.	.	.	.	.	.
	24DCHLRPHENOXYBUTYRC	2	0	0	2	0	0	.	.	.	.	.	.	.	.	.	.	.	.
	2,4 D PROPIONIC ACID	2	0	0	2	0	0	.	.	.	.	.	.	.	.	.	.	.	.
	DICAMBA	2	0	0	2	0	0	.	.	.	.	.	.	.	.	.	.	.	.
	PICHLORAM	0	0	0	0	0	0	.	.	.	.	.	.	.	.	.	.	.	.
	SILVEX	2	0	0	2	0	0	.	.	.	.	.	.	.	.	.	.	.	.
	DIAZINON	2	0	0	2	0	0	.	.	.	.	.	.	.	.	.	.	.	.
	DICHLORVOS	2	0	0	2	0	0	.	.	.	.	.	.	.	.	.	.	.	.
	CHLORPYRIFOS	2	0	0	2	0	0	.	.	.	.	.	.	.	.	.	.	.	.
	ETHION	2	0	0	2	0	0	.	.	.	.	.	.	.	.	.	.	.	.

SCAN	PARAMETER	SITE RAW TOTAL	RAW POSITIVE	RAW TRACE	TREATED TOTAL	TREATED POSITIVE	TREATED TRACE	SITE 1 TOTAL	SITE 1 POSITIVE	SITE 1 TRACE	SITE 3 TOTAL	SITE 3 POSITIVE	SITE 3 TRACE	SITE 2 TOTAL	SITE 2 POSITIVE	SITE 2 TRACE	SITE 4 TOTAL	SITE 4 POSITIVE	SITE 4 TRACE
SPECIFIC PESTICIDES	AZINPHOS-METHYL	0	0	0	0	0	0	.	.	.	.	.	.	.	.	.	.	.	.
	MALATHION	2	0	0	2	0	0	.	.	.	.	.	.	.	.	.	.	.	.
	MEVINPHOS	2	0	0	2	0	0	.	.	.	.	.	.	.	.	.	.	.	.
	METHYL PARATHION	2	0	0	2	0	0	.	.	.	.	.	.	.	.	.	.	.	.
	METHYLTRITHION	2	0	0	2	0	0	.	.	.	.	.	.	.	.	.	.	.	.
	PARATHION	2	0	0	2	0	0	.	.	.	.	.	.	.	.	.	.	.	.
	PHORATE	2	0	0	2	0	0	.	.	.	.	.	.	.	.	.	.	.	.
	ALDAN	2	0	0	2	0	0	.	.	.	.	.	.	.	.	.	.	.	.
	BOMMEL	2	0	0	2	0	0	.	.	.	.	.	.	.	.	.	.	.	.
	AMINOCARB	0	0	0	0	0	0	.	.	.	.	.	.	.	.	.	.	.	.
	BENOMYL	2	0	0	2	0	0	.	.	.	.	.	.	.	.	.	.	.	.
	BUX	2	0	0	2	0	0	.	.	.	.	.	.	.	.	.	.	.	.
	CARBOFURAN	2	0	0	2	0	0	.	.	.	.	.	.	.	.	.	.	.	.
	CICP	2	0	0	2	0	0	.	.	.	.	.	.	.	.	.	.	.	.
	DIALLATE	2	0	0	2	0	0	.	.	.	.	.	.	.	.	.	.	.	.
	EPTAM	2	0	0	2	0	0	.	.	.	.	.	.	.	.	.	.	.	.
	IPC	2	0	0	2	0	0	.	.	.	.	.	.	.	.	.	.	.	.
	PROPOXUR	2	0	0	2	0	0	.	.	.	.	.	.	.	.	.	.	.	.
	CARBARYL	2	0	0	2	0	0	.	.	.	.	.	.	.	.	.	.	.	.
	BUTYLATE	2	0	0	2	0	0	.	.	.	.	.	.	.	.	.	.	.	.
*TOTAL SCAN SPECIFIC PESTICIDES		56	0	0	56	0	0	0	0	0	0	0	0	0	0	0	0	0	0
VOLATILES	BENZENE	8	0	1	9	0	0	7	0	0	3	0	0	7	0	0	3	0	0
	TOLUENE	8	0	0	9	0	3	7	0	2	3	0	0	7	0	3	3	0	0
	ETHYLBENZENE	8	0	1	9	0	7	7	0	2	3	0	1	7	0	1	3	0	1
	P-XYLENE	8	0	0	9	0	0	7	0	0	3	0	0	7	0	0	3	0	0
	M-XYLENE	8	0	0	9	0	1	7	0	1	3	0	0	7	0	1	3	0	0
	O-XYLENE	8	0	1	9	0	2	7	0	0	3	0	0	7	0	1	3	0	0
	STYRENE	3	0	1	3	0	1	.	.	.	3	1	2	.	.	.	3	1	1
	1,1 DICHLOROETHYLENE	8	0	0	9	0	0	7	0	0	3	0	0	7	0	0	3	0	0

SCAN	PARAMETER	SITE RAW TOTAL	RAW POSITIVE	RAW TRACE	TREATED TOTAL	TREATED POSITIVE	TREATED TRACE	SITE 1 TOTAL	SITE 1 POSITIVE	SITE 1 TRACE	SITE 3 TOTAL	SITE 3 POSITIVE	SITE 3 TRACE	SITE 2 TOTAL	SITE 2 POSITIVE	SITE 2 TRACE	SITE 4 TOTAL	SITE 4 POSITIVE	SITE 4 TRACE
VOLATILES	METHYLENE CHLORIDE	8	0	0	9	0	0	7	0	0	3	0	0	7	0	0	3	0	0
	T1,2DICHLOROETHYLENE	8	0	0	9	0	0	7	0	0	3	0	0	7	0	0	3	0	0
	1,1 DICHLOROETHANE	8	0	0	9	0	0	7	0	1	3	0	0	7	0	0	3	0	0
	CHLOROFORM	8	4	4	9	9	0	7	7	0	3	3	0	7	7	0	3	3	0
	111, TRICHLOROETHANE	8	0	1	9	0	0	7	0	0	3	0	0	7	0	0	3	0	0
	1,2 DICHLOROETHANE	8	0	0	9	0	1	7	0	2	3	0	0	7	0	1	3	0	0
	CARBON TETRACHLORIDE	8	0	0	9	0	0	7	0	0	3	0	0	7	0	0	3	0	0
	1,2 DICHLOROPROPANE	8	0	0	9	0	0	7	0	0	3	0	0	7	0	0	3	0	0
	TRICHLOROETHYLENE	8	0	0	9	0	0	7	0	0	3	0	0	7	0	0	3	0	0
	DICHLOROBROMOMETHANE	8	1	3	9	9	0	7	7	0	3	3	0	7	7	0	3	3	0
	112 TRICHLOROETHANE	8	0	0	9	0	0	7	0	0	3	0	0	7	0	0	3	0	0
	CHLORODIBROMOMETHANE	8	0	1	9	0	8	7	0	5	3	0	2	7	0	6	3	1	2
	T-CHLOROETHYLENE	8	0	0	9	0	1	7	0	0	3	0	1	7	0	1	3	0	1
	BROMOFORM	8	0	0	9	0	0	7	0	0	3	0	0	7	0	0	3	0	0
	1122 T-CHLOROETHANE	8	0	0	9	0	0	7	0	0	3	0	0	7	0	0	3	0	0
	CHLOROBENZENE	8	0	0	9	0	0	7	0	0	3	0	0	7	0	0	3	0	0
	1,4 DICHLOROBENZENE	8	0	0	9	0	0	7	0	0	3	0	0	7	0	0	3	0	0
	1,3 DICHLOROBENZENE	8	0	0	9	0	0	7	0	0	3	0	0	7	0	0	3	0	0
	1,2 DICHLOROBENZENE	8	0	0	9	0	0	7	0	0	3	0	0	7	0	0	3	0	0
	TRIFLUOROCHLOROTOLUE	3	0	0	3	0	0	4	0	0	.	.	.	4	0	0	.	.	.
	ETHLYENE DIBROMIDE	8	0	0	9	0	0	7	0	0	3	0	0	7	0	0	3	0	0
	TOTL TRIHALOMETHANES	8	0	4	9	9	0	7	7	0	3	3	0	7	7	0	3	3	0
*TOTAL SCAN VOLATILES		230	5	17	258	27	24	200	21	13	87	10	6	200	21	14	87	11	5
*TOTAL GROUP ORGANIC		1043	12	25	1071	34	36	585	21	19	231	10	10	585	21	20	231	11	8
TOTAL		1655	463	150	1713	404	188	1330	512	176	510	213	60	1409	558	198	508	213	56

KEY TO TABLE 5 and 6

A ONTARIO DRINKING WATER OBJECTIVES (ODWO)
1. Maximum Acceptable Concentration (MAC)
1+. MAC for Total Trihalomethanes
1*. MAC for Bacteriological Analyses
Poor water quality is indicated when :
- total coliform counts > 0 < 5
- P/A Bottle Test is present after 48 hours
- Aeromonas organisms are detected in more than 25% of samples in a single submission or in successive submissions from the same sampling site
- Pseudomonas Aeruginosa, Staphylococcus Aureus and members of the Fecal Streptococcus group should not be detected in any sample
- Standard Plate Count should not exceed 500 organisms per ml at 35 ^{0}C within 48 hours

2. Interim Maximum Acceptable Concentration (IMAC)
3. Maximum Desirable Concentration (MDC)
4. Aesthetic or Recommended Operational Guideline
- hardness levels between 80 and 100 mg/L as calcium carbonate are considered to provide an acceptable balance between corrosion and incrustation, water supplies with a hardness >200 mg/L are considered poor and those in excess of 500 mg/L are unacceptable.

B HEALTH & WELFARE CANADA (H&W)
1. Maximum Acceptable Concentration (MAC)
2. Proposed MAC
3. Interim MAC
4. Aesthetic Objective (AO) (for xylenes, the AO is a total)

C WORLD HEALTH ORGANIZATION (WHO)
1. Guideline Value (GV)
2. Tentative GV
3. Aesthetic GV

D US ENVIRONMENTAL PROTECTION AGENCY (EPA)
1. Maximum Contaminant Level (MCL)
2. Suggested No-Adverse Effect Level (SNAEL)
3. Lifetime Health Advisory
4. EPA Ambient Water Quality Criteria

F EUROPEAN ECONOMIC COMMUNITY (EEC)
1. Health Related Guideline Level
2. Aesthetic Guideline Level
3. Maximum Admissable Concentration (MADC)

G CALIFORNIA STATE DEPARTMENT OF HEALTH-GUIDELINE VALUE

H USSR MAXIMUM PERMISSIBLE CONCENTRATION

I NEW YORK STATE AMBIENT WATER GUIDELINE

N/A NONE AVAILABLE

INTERPRETATION OF DATA

The interpretation of analytical results that are obtained from measurements near the limit of detection of the measurement process is subject to greater uncertainty than those at higher concentrations. The principle areas of concern relate to whether the substance has actually been detected, whether it has been properly identified, and whether it is an artifact of the measurement process. In other words, false positives can be caused by the instrumentation or the test procedures used, when in fact these compounds are not present in the sample.

There are several methods to treat data from such measurements:
1. Exclude the low-level data because of this uncertainty factor. However, studies of long-term environmental trends and modelling may be adversely affected by exclusion of such data.
2. Qualify these data so the user is aware of the greater uncertainty associated with their use.

For the Drinking Water Surveillance Program, measurements near the limit of detection of the measurement process are reported qualified by the code "<T". Results quantified by "W" indicate a zero measurement. These results are reported for purposes of modelling and long-term trend analysis and no significance should be attributed to a single determination of a substance below "T" (a single determination may well be a false positive). Repeat analysis or additional data are needed before it can be stated with certainty that the substance in question was truly present. On the other hand, it is less likely that repeated detection of a substance at or near the limit of detection at a specific location is solely due to an artifact in the measurement system, and more likely represents a true positive. However the average of such data is still only an estimate of the amount of substance present subject to the possible biases of the method used.

LABORATORY RESULTS, REMARK DESCRIPTIONS

.	No Sample Taken
BDL	Below Minimum Measurable Amount
<T	Greater Than Detection Limit But Not Confident (SEE INTERPRETATION OF RESULTS ABOVE)
>	Results Are Greater Than The Upper Limit
<=>	Approximate Result
!AW	No Data: Analysis Withdrawn
!CR	No Data: Could Not Confirm By Reanalysis
!CS	No Data: Contamination Suspected
!IL	No Data: Sample Incorrectly Labelled
!IS	No Data: Insufficient Sample
!LA	No Data: Laboratory Accident

!LD	No Data: Test Queued After Sample Discarded
!NA	No Data: No Authorization To Perform Reanalysis
!NP	No Data: No Procedure
!NR	No Data: Sample Not Received
!OP	No Data: Obscured Plate
!QU	No Data: Quality Control Unacceptable
!PE	No Data: Procedural Error - Sample Discarded
!PH	No Data: Sample pH Outside Valid Range
!RE	No Data: Received Empty
!RO	No Data: See Attached Report (no numeric results)
!SM	No Data: Sample Missing
!SS	No Data: Send Separate Sample Properly Preserved
!UI	No Data: Indeterminant Interference
!TX	No Data: Time Expired
A3C	Approximate, Total Count Exceeded 300 Colonies
APL	Additional Peak, Large, Not Priority Pollutant
APS	Additional Peak, Less Than, Not Priority Pollutant
CIC	Possible Contamination, Improper Cap
CRO	Calculated Result Only
PPS	Test Performed On Preserved Sample
RMP	P and M-Xylene Not Separated
RRV	Rerun Verification
RVU	Reported Value Unusual
SPS	Several Peaks, Small, Not Priority Pollutant
UAL	Unreliable: Sample Age Exceeds Normal Limit
UCR	Unreliable: Could Not Confirm By Reanalysis
UCS	Unreliable: Contamination Suspected
UIN	Unreliable: Indeterminant Interference
XP	Positive After X Number of Hours
T# (T06)	Result Taken After # Hours

TABLE 5

DRINKING WATER SURVEILLANCE PROGRAM BELLEVILLE 1988

	WATER TREATMENT PLANT		DISTRIBUTION SYSTEM							
	RAW	TREATED	SITE 1		SITE 3		SITE 2		SITE 4	
			STANDING	FREE FLOW	STANDING	FREE FLOW	STANDING	FREE FLOW	STANDING	FREE FLOW
BACTERIOLOGICAL										
AEROMONAS SP (0=ABSENT)			DET'N LIMIT = N/A		GUIDELINE = 0 (A1)					
AUG	.	.	.		0	.	.	.	.	.
E. COLI P/A (0=ABSENT)			DET'N LIMIT = N/A		GUIDELINE = N/A					
AUG	.	.	.		0	.	.	.	.	.
FECAL COLIFORM MF (CT/100ML)			DET'N LIMIT = 0		GUIDELINE = 0 (A1)					
JAN	1	.	.		.	.	.	.	.	.
FEB	2	.	.		.	.	.	.	.	.
MAR	0	.	.		.	.	.	.	.	.
APR	1	.	.		.	.	.	.	.	.
MAY	0	.	.		.	.	.	.	.	.
JUN	16	.	.		.	.	.	.	.	.
JUL	BDL	.	.		.	.	.	.	.	.
AUG	0	.	.		.	.	.	.	.	.
SEP	3	.	.		.	.	.	.	.	.
OCT	12 T24	.	.		.	.	.	.	.	.
NOV	1 T24	.	.		.	.	.	.	.	.
DEC	1 T24	.	.		.	.	.	.	.	.
FECAL COLIFORM (0=ABSENT)			DET'N LIMIT = N/A		GUIDELINE = 0 (A1)					
AUG	.	.	.		0	.	.	.	.	.

	WATER TREATMENT PLANT		DISTRIBUTION SYSTEM							
SITE			SITE 1		SITE 3		SITE 2		SITE 4	
TYPE	RAW	TREATED	STANDING	FREE FLOW	STANDING	FREE FLOW	STANDING	FREE FLOW	STANDING	FREE FLOW
STANDRD PLATE CNT MF (CT/ML)			DET'N LIMIT = 0		GUIDELINE = 500/ML (A1)					
JAN	130	2	.		0	.	.	0	.	.
FEB	10P	0	.		ILA	.	.	ILA	.	.
MAR	320	5	.		4	.	.	2	.	.
APR	520	0	.		1	.	.	1	.	.
MAY	200	1	.		2	.	.	210	.	.
JUN	2400 >	0	.		0	.	.	11	.	.
JUL	2400 >	8	.		28	.	.	18	.	.
AUG	9000	54	.		IAW	.	.	IAW	.	.
SEP	.	5	.		38	.	.	180	.	.
OCT	.	2 <=>	.		.	.	6 <=>	.	.	19 T24
NOV	.	5 <=>	.		.	.	520 T24	.	.	109 T24
DEC	.	0 <=>	.		.	.	790 T48	.	.	1 <=>
P/A BOTTLE (0=ABSENT)			DET'N LIMIT = 0		GUIDELINE = 0 (A1*)					
JAN	.	0	.		0	.	.	0	.	.
FEB	.	0	.		0	.	.	0	.	.
MAR	.	0	.		0	.	.	0	.	.
APR	.	0	.		0	.	.	0	.	.
MAY	.	0	.		0	.	.	0	.	.
JUN	.	0	.		0	.	.	0	.	.
JUL	.	0	.		0	.	.	0	.	.
AUG	.	0	.		1	.	.	0	.	.
STAPH AUREUS (0=ABSENT)			DET'N LIMIT = N/A		GUIDELINE = 0 (A1)					
AUG	.	.	.		0	.	.	.	.	.
COLIFORM (0=ABSENT)			DET'N LIMIT = N/A		GUIDELINE = 0 (A1)					
AUG	.	.	.		0	.	.	.	.	.

	WATER TREATMENT PLANT		DISTRIBUTION SYSTEM							
SITE TYPE	RAW	TREATED	SITE 1		SITE 3		SITE 2		SITE 4	
			STANDING	FREE FLOW	STANDING	FREE FLOW	STANDING	FREE FLOW	STANDING	FREE FLOW
TOTAL COLIFORM MF (CT/100ML)			DET'N LIMIT = 0		GUIDELINE = 5/100ML(A1)					
JAN	72	0	.	0	.	.	.	0	.	.
FEB	1700	0	.	0	.	.	.	0	.	.
MAR	81 ASC	0	.	0	.	.	.	0	.	.
APR	1400	0	.	0	.	.	.	0	.	.
MAY	48 ASC	0	.	0	.	.	.	0	.	.
JUN	500 ASC	0	.	0	.	.	.	0	.	.
JUL	300 ASC	0	.	0	.	.	.	0	.	.
AUG	200	0	.	0	.	.	.	0	.	.
SEP	1300	0	.	0	.	.	.	0	.	.
OCT	92 ASC	0 124	.	.	.	0 124	.	.	.	0 124
NOV	52 124	0 124	.	.	.	0 124	.	.	.	0 124
DEC	120 ASC	0 124	.	.	.	0 148	.	.	.	0 124
T COLIFORM BCKGRD MF (CT/100ML)			DET'N LIMIT = 0		GUIDELINE = N/A					
JAN	480	0	.	0	.	.	.	0	.	.
FEB	28200	0	.	0	.	.	.	0	.	.
MAR	680	0	.	0	.	.	.	0	.	.
APR	2700	0	.	0	.	.	.	0	.	.
MAY	1800	0	.	0	.	.	.	0	.	.
JUN	46000	0	.	0	.	.	.	14	.	.
JUL	50000	1	.	700	.	.	.	520	.	.
AUG	12600	0	.	0	.	.	.	130	.	.
SEP	14000	0	.	1	.	.	.	560	.	.
OCT	9600 >	0 124	.	.	.	0 124	.	.	.	124 124
NOV	1240 124	0 124	.	.	.	0 124	.	.	.	200 124
DEC	3320 124	0 124	.	.	.	16 148	.	.	.	0 124

	WATER TREATMENT PLANT		DISTRIBUTION SYSTEM							
SITE TYPE	RAW	TREATED	SITE 1		SITE 3		SITE 2		SITE 4	
			STANDING	FREE FLOW	STANDING	FREE FLOW	STANDING	FREE FLOW	STANDING	FREE FLOW
CHEMISTRY (FLD)										
FLD CHLORINE (COMB) (MG/L)			DET'N LIMIT = N/A		GUIDELINE = N/A					
JAN	0	.230	.	.200	0	0	.190	.300	.	.
FEB	0	.270	.	.400	0	0	.190	.300	.	.
MAR	0	.250	.	.200	.	.	.	.200	.	.
APR	0	.380	.	.200	0	0	.100	.300	.	.
MAY	0	.210	.	.200	0	0	.100	.300	.	.
JUN	0	.310	.	.400	0	0	.100	.300	.	.
JUL	0	.400	.	.200	0	0	.300	.300	.	.
AUG	0	.450	.080	.260	0	0	.100	.300	.	.
SEP	0	.350	.	.300	.	.	.	.200	.	.
OCT	0	.340	.	.	.	.300	.	.	.	.
NOV	0	.330	.	.	.	.	.	.	.300	.200
DEC	0	.260	.	.	.	.300	.	.	.100	.200
FLD CHLORINE FREE (MG/L)			DET'N LIMIT = N/A		GUIDELINE = N/A					
JAN	0	.710	.100	.100	.	.	.100	.100	.	.
FEB	0	.750	.100	.300	0	0	.100	.100	.	.
MAR	0	.650	.100	.300	0	0	.100	.100	.	.
APR	0	.750	.100	.300	0	0	.100	.100	.	.
MAY	0	.620	.100	.300	0	0	.100	.100	.	.
JUN	0	.800	.100	.100	0	0	.100	.100	.	.
JUL	0	.900	.100	.100	0	0	.100	.100	.	.
AUG	0	.750	.	.	.	.	.100	.100	.	.
SEP	0	1.020	.	.	.	.	.100	.100	.	.
OCT	0	.750	.	.	.	.	.	.	.	.
NOV	0	.740	.	.	.100	.100	.	.	.200	.
DEC	0	.880	.	.	.	.	.	.	.	.500
FLD CHLORINE (TOTAL) (MG/L)			DET'N LIMIT = N/A		GUIDELINE = N/A					
JAN	0	.940	.100	.300	.	.	.290	.400	.	.

	WATER TREATMENT PLANT		DISTRIBUTION SYSTEM							
SITE TYPE	RAW	TREATED	SITE 1		SITE 3		SITE 2		SITE 4	
			STANDING	FREE FLOW	STANDING	FREE FLOW	STANDING	FREE FLOW	STANDING	FREE FLOW
FEB	.	1.000	.100	.700	.	.	.200	.400	.	.
MAR	.	.900	.100	.500	.	.	.100	.300	.	.
APR	.	1.050	.100	.500	.	.	.200	.400	.	.
MAY	.	.650	.100	.500	.	.	.200	.400	.	.
JUN	.	1.110	.100	.590	.	.	.200	.400	.	.
JUL	.	1.500	.100	.500	.	.	.400	.400	.	.
AUG	.	1.200	.080	.260	.	.	.200	.400	.	.
SEP	.	1.370	.	.500	.	.	.100	.300	.	.
OCT	.	1.090	.	.	.	.300	.	.	.	.
NOV	.	1.070	.	.	.100	.100	.	.	.500	.200
DEC	.	1.140	.	.	.	.300	.	.	.100	.700
FLD PH (DIMENSLESS)			DET'N LIMIT = N/A		GUIDELINE = 6.5-8.5(AA)					
JAN	7.700	6.800	7.000	6.800	.	.	6.800	6.800	.	.
FEB	7.700	6.950	7.000	6.800	.	.	7.000	6.800	.	.
MAR	7.650	6.900	7.000	7.000	.	.	6.800	6.800	.	.
APR	7.800	6.750	6.800	6.800	.	.	6.800	6.800	.	.
MAY	7.950	6.800	7.000	6.800	.	.	6.800	6.800	.	.
JUN	8.100	6.800	6.800	6.800	.	.	6.800	6.800	.	.
JUL	7.950	6.700	6.800	6.800	.	.	6.800	6.800	.	.
AUG	8.500	6.700	.	.	.	.	6.800	6.800	.	.
SEP	8.000	6.800	.	.	.	.	6.800	6.800	.	.
OCT	8.000	6.800	.	.	7.000	6.900	.	.	.	.
NOV	7.950	6.800	.	.	7.000	6.800	.	.	7.000	6.800
DEC	7.750	6.800	.	.	7.200	6.800	.	.	7.000	7.000
FLD TEMPERATURE (DEG.C)			DET'N LIMIT = N/A		GUIDELINE = 15 (AT)					
JAN	1.500	3.000	15.000	8.000	.	.	22.000	7.000	.	.
FEB	2.000	3.000	18.000	8.000	.	.	18.000	5.000	.	.
MAR	2.000	3.000	17.000	6.000	.	.	17.000	5.000	.	.

	WATER TREATMENT PLANT		DISTRIBUTION SYSTEM							
SITE TYPE	RAW	TREATED	SITE 1		SITE 3		SITE 2		SITE 4	
			STANDING	FREE FLOW	STANDING	FREE FLOW	STANDING	FREE FLOW	STANDING	FREE FLOW
APR	7.000	8.500	18.000	9.000	.	.	17.000	7.000	.	.
MAY	10.000	10.500	20.000	15.000	.	.	18.000	10.000	.	.
JUN	20.000	20.000	21.000	17.000	.	.	19.000	16.000	.	.
JUL	20.000	21.500	23.000	18.000	.	.	19.000	18.000	.	.
AUG	26.000	26.[illegible]9	25.000	24.500	.	.	18.000	21.000	.	.
SEP	19.500	20.000	.	20.500	.	.	19.000	20.000	.	.
OCT	17.000	17.500	.	.	22.000	18.500	.	.	.	.
NOV	7.000	8.000	.	.	18.000	16.000	.	.	21.000	11.500
DEC	2.500	3.300	.	.	21.000	16.000	.	.	20.000	10.500
FLD TURBIDITY (FTU	)		DET'N LIMIT = N/A		GUIDELINE = 1.0 (AT)					
JAN	1.100	.260	.	.	.	.	.	.	.	.
FEB	2.500	.310	.	.	.	.	.	.	.	.
MAR	1.000	.500	.	.	.	.	.	.	.	.
APR	3.000	.290	.	.	.	.	.	.	.	.
MAY	1.600	.170	.	.	.	.	.	.	.	.
JUN	2.100	.300	.	.	.	.	.	.	.	.
JUL	3.800	.480	.	.	.	.	.	.	.	.
AUG	6.800	.390	.	.	.	.	.	.	.	.
SEP	4.600	.220	.	.	.	.	.	.	.	.
OCT	3.400	.230	.	.	.	.	.	.	.	.
NOV	2.300	.210	.	.	.	.	.	.	.	.
DEC	1.500	.160	.	.	.	.	.	.	.	.

	WATER TREATMENT PLANT		DISTRIBUTION SYSTEM							
SITE			SITE 1		SITE 3		SITE 2		SITE 4	
TYPE	RAW	TREATED	STANDING	FREE FLOW	STANDING	FREE FLOW	STANDING	FREE FLOW	STANDING	FREE FLOW
CHEMISTRY (LAB)										
ALKALINITY (MG/L)			DET'N LIMIT = .200		GUIDELINE = 30-500 (A4)					
JAN	121.000	95.300	95.900	94.700	.	.	95.900	96.100	.	.
FEB	115.300	92.700	94.700	92.000	.	.	96.900	92.600	.	.
MAR	119.700	95.600	96.300	95.400	.	.	96.100	98.400	.	.
APR	115.700	83.100	INR	INR	.	.	INR	INR	.	.
MAY	101.800	77.200	77.600	75.500	.	.	78.100	74.700	.	.
JUN	99.800	71.700	69.600	72.600	.	.	74.100	72.400	.	.
JUL	103.100	75.600	74.500	73.500	.	.	74.200	73.400	.	.
AUG	104.600	73.700	75.200	75.300	.	.	77.100	76.800	.	.
SEP	103.200	73.100	74.200	73.200	.	.	74.400	74.000	.	.
OCT	104.100	74.100	.	.	75.800	75.800	.	.	76.400	75.800
NOV	108.900	79.800	.	.	81.100	80.800	.	.	82.700	81.500
DEC	104.200	79.700	.	.	80.300	80.200	.	.	80.200	80.500
CALCIUM (MG/L)			DET'N LIMIT = .100		GUIDELINE = 100 (F2)					
JAN	48.400	48.000	48.800	48.600	.	.	48.800	49.000	.	.
FEB	46.000	45.200	45.800	43.600	.	.	45.800	43.200	.	.
MAR	44.000	42.400	43.800	44.400	.	.	44.200	43.800	.	.
APR	43.800	42.200	INR	INR	.	.	INR	INR	.	.
MAY	38.600	37.200	38.400	39.400	.	.	39.000	38.000	.	.
JUN	38.000	37.800	38.000	37.400	.	.	39.000	37.800	.	.
JUL	39.400	38.400	38.800	38.800	.	.	39.200	38.800	.	.
AUG	39.200	37.900	40.500	40.700	.	.	41.500	40.500	.	.
SEP	39.800	39.600	39.600	40.000	.	.	41.200	40.400	.	.
OCT	40.800	40.400	.	.	40.600	41.200	.	.	40.600	41.200
NOV	44.000	43.600	.	.	42.600	42.400	.	.	43.000	41.400
DEC	39.800	39.200	.	.	38.200	38.600	.	.	38.000	36.800
CYANIDE (MG/L)			DET'N LIMIT = 0.001		GUIDELINE = .200 (A1)					
JAN	BDL	BDL	.	BDL	.	.	.	BDL	.	.

	WATER TREATMENT PLANT		DISTRIBUTION SYSTEM							
SITE TYPE	RAW	TREATED	SITE 1		SITE 3		SITE 2		SITE 4	
			STANDING	FREE FLOW	STANDING	FREE FLOW	STANDING	FREE FLOW	STANDING	FREE FLOW
FEB	BDL	BDL	.	.003 <T	.	.	.	.003 <T	.	.
MAR	BDL	BDL	.	BDL	.	.	.	BDL	.	.
APR	BDL	BDL	.	BDL	.	.	.	BDL	.	.
MAY	BDL	BDL	.	BDL	.	.	.	BDL	.	.
JUN	BDL	BDL	.	BDL	.	.	.	BDL	.	.
JUL	BDL	BDL	.	BDL	.	.	.	BDL	.	.
AUG	BDL	BDL	.	BDL	.	.	.	BDL	.	.
SEP	BDL	BDL	.	BDL	.	.	.	BDL	.	.
OCT	BDL	BDL	.	.	.	BDL	.	.	.	BDL
NOV	BDL	BDL	.	.	.	BDL	.	.	.	BDL
DEC	BDL	BDL	.	.	.	BDL	.	.	.	BDL
CHLORIDE (MG/L)			DET'N LIMIT = .200		GUIDELINE = 250 (A3)					
JAN	10.900	13.200	13.500	13.200	.	.	14.100	13.400	.	.
FEB	11.600	14.200	14.600	14.300	.	.	15.300	14.500	.	.
MAR	14.500	17.000	17.400	17.100	.	.	18.700	17.100	.	.
APR	9.800	12.100	INR	INR	.	.	INR	INR	.	.
MAY	7.800	10.300	10.800	10.300	.	.	11.300	10.400	.	.
JUN	7.800	11.500	12.200	12.000	.	.	12.000	12.200	.	.
JUL	9.800	14.600	15.000	14.500	.	.	15.000	14.600	.	.
AUG	11.500	17.200	17.000	17.200	.	.	17.200	17.000	.	.
SEP	12.300	16.500	16.600	16.400	.	.	16.600	16.400	.	.
OCT	12.800	15.900	.	.	15.800	15.700	.	.	16.000	15.800
NOV	12.000	15.200	.	.	15.400	15.800	.	.	15.500	15.300
DEC	9.100	11.800	.	.	12.700	12.500	.	.	12.000	11.800
COLOUR (TCU)			DET'N LIMIT = .5		GUIDELINE = 5.0 (A3)					
JAN	13.500	3.500	5.000	4.000	.	.	4.500	4.500	.	.
FEB	15.000	3.500	5.000	4.000	.	.	4.000	4.000	.	.
MAR	16.000	4.000	6.000	4.500	.	.	5.000	5.000	.	.

	WATER TREATMENT PLANT		DISTRIBUTION SYSTEM							
SITE TYPE	RAW	TREATED	SITE 1		SITE 3		SITE 2		SITE 4	
			STANDING	FREE FLOW	STANDING	FREE FLOW	STANDING	FREE FLOW	STANDING	FREE FLOW
APR	17.500	3.000	INR	INR	.	.	INR	INR	.	.
MAY	16.000	1.500 <T	4.500	3.500	.	.	4.500	4.000	.	.
JUN	17.000	4.000	6.000	5.500	.	.	5.500	5.000	.	.
JUL	10.000	4.000	5.000	5.000	.	.	5.000	5.000	.	.
AUG	14.500	3.000	4.500	5.000	.	.	4.500	4.000	.	.
SEP	14.500	2.000 <T	3.500	3.500	.	.	3.500	3.500	.	.
OCT	12.500	2.500	.	.	3.500	3.500	.	.	4.000	3.500
NOV	13.000	2.000 <T	.	.	3.000	4.000	.	.	3.500	4.000
DEC	11.500	2.500	.	.	4.000	3.500	.	.	3.000	2.500
CONDUCTIVITY (UMHO/CM)			DET'N LIMIT = 1		GUIDELINE = 400 (F2)					
JAN	307	321	316	310	.	.	314	314	.	.
FEB	303	299	305	296	.	.	306	298	.	.
MAR	309	311	314	311	.	.	318	313	.	.
APR	277	278	INR	INR	.	.	INR	INR	.	.
MAY	250	262	267	258	.	.	267	255	.	.
JUN	243	256	260	259	.	.	261	258	.	.
JUL	256	269	275	272	.	.	153	271	.	.
AUG	266	282	281	284	.	.	285	280	.	.
SEP	265	282	287	283	.	.	284	283	.	.
OCT	267	280	.	.	285	282	.	.	284	281
NOV	278	291	.	.	292	303	.	.	293	292
DEC	262	271	.	.	277	276	.	.	273	272
FLUORIDE (MG/L)			DET'N LIMIT = .01		GUIDELINE = 2.400 (A1)					
JAN	.080	1.200	1.260	1.220	.	.	1.400	1.240	.	.
FEB	.080	1.140	1.280	1.160	.	.	1.280	1.160	.	.
MAR	.060	1.130	1.160	1.110	.	.	1.170	1.100	.	.
APR	.090	1.170	INR	INR	.	.	INR	INR	.	.
MAY	.070	.170	.470	.270	.	.	.610	.340	.	.

	WATER TREATMENT PLANT		DISTRIBUTION SYSTEM							
SITE TYPE	RAW	TREATED	SITE 1		SITE 3		SITE 2		SITE 4	
			STANDING	FREE FLOW	STANDING	FREE FLOW	STANDING	FREE FLOW	STANDING	FREE FLOW
JUN	.060	1.140	1.170	1.150	.	.	1.180	1.140	.	.
JUL	.090	1.210	1.150	1.140	.	.	1.140	1.130	.	.
AUG	.090	1.110	1.110	1.070	.	.	1.050	1.090	.	.
SEP	.100	1.180	1.140	1.140	.	.	1.120	1.180	.	.
OCT	.120	1.180	.	.	1.180	1.180	.	.	1.160	1.180
NOV	.100	1.180	.	.	1.120	1.180	.	.	1.180	1.120
DEC	.100	1.240	.	.	1.240	1.180	.	.	1.280	1.220
HARDNESS (MG/L)			DET'N LIMIT = .500		GUIDELINE = 80-100 (A4)					
JAN	141.000	140.000	142.000	142.000	.	.	142.000	143.000	.	.
FEB	135.000	132.000	133.000	128.000	.	.	134.000	126.000	.	.
MAR	131.000	127.000	130.000	132.000	.	.	132.000	130.000	.	.
APR	126.000	122.000	INR	INR	.	.	INR	INR	.	.
MAY	113.000	109.000	110.000	114.000	.	.	113.000	110.000	.	.
JUN	111.000	111.000	111.000	109.000	.	.	114.000	110.000	.	.
JUL	117.000	114.000	116.000	115.000	.	.	116.000	115.000	.	.
AUG	118.000	113.100	120.000	120.000	.	.	122.000	120.000	.	.
SEP	122.000	121.000	119.000	121.000	.	.	124.000	122.000	.	.
OCT	123.000	122.000	.	.	125.000	124.000	.	.	125.000	125.000
NOV	131.000	130.000	.	.	129.000	128.000	.	.	130.000	126.000
DEC	120.000	118.000	.	.	117.000	117.000	.	.	115.000	112.000
IONCAL (DIMENSIONLESS)			DET'N LIMIT = N/A		GUIDELINE = N/A					
JAN	.000 NAF	.000 NAF	.000 NAF	.000 NAF	.	.	.000 NAF	.000 NAF	.	.
FEB	.000 NAF	.000 NAF	.000 NAF	.000 NAF	.	.	.000 NAF	.000 NAF	.	.
MAR	.000 NAF	.000 NAF	.000 NAF	.000 NAF	.	.	.000 NAF	.000 NAF	.	.
APR	.000 NAF	.000 NAF	.000 NAF	.000 NAF	.	.	.000 NAF	.000 NAF	.	.
MAY	.000 NAF	.000 NAF	.000 NAF	.000 NAF	.	.	.000 NAF	.000 NAF	.	.
JUN	.000 NAF	.000 NAF	.000 NAF	.000 NAF	.	.	.000 NAF	.000 NAF	.	.
JUL	.000 NAF	.000 NAF	.000 NAF	.000 NAF	.	.	.000 NAF	.000 NAF	.	.

	WATER TREATMENT PLANT		DISTRIBUTION SYSTEM							
SITE TYPE	RAW	TREATED	SITE 1		SITE 3		SITE 2		SITE 4	
			STANDING	FREE FLOW	STANDING	FREE FLOW	STANDING	FREE FLOW	STANDING	FREE FLOW
AUG	2.529	4.266	.763	.991	.	.	1.371	.870	.	.
SEP	2.345	2.312	1.276	2.665	.	.	3.616	3.018	.	.
OCT	1.887	2.910	.	.	3.222	3.567	.	.	1.984	4.788
NOV	2.764	4.764	.	.	3.733	2.380	.	.	3.619	2.174
DEC	4.509	5.800	.	.	8.785	10.080	.	.	10.960	11.550
LANGELIERS INDEX (DIMENSIONLESS)			DET'N LIMIT = N/A		GUIDELINE = N/A					
JAN	.596 NAF	-.033 NAF	.197 NAF	.139 NAF	.	.	.268 NAF	.040 NAF	.	.
FEB	.384 NAF	-.116 NAF	.056 NAF	-.054 NAF	.	.	-.054 NAF	-.176 NAF	.	.
MAR	.409 NAF	.145 NAF	.132 NAF	-.015 NAF	.	.	.105 NAF	.012 NAF	.	.
APR	.455 NAF	-.175 NAF	.	.	.	.	.	.	.	.
MAY	.395 NAF	-.066 NAF	.038 NAF	-.069 NAF	.	.	-.072 NAF	-.148 NAF	.	.
JUN	.512 NAF	.151 NAF	.128 NAF	.161 NAF	.	.	.127 NAF	.115 NAF	.	.
JUL	.337 NAF	-.286 NAF	-.178 NAF	-.263 NAF	.	.	-.158 NAF	-.303 NAF	.	.
AUG	.287	-.346	-.288	-.126	.	.	-.228	-.350	.	.
SEP	.628	.150	.154	.064	.	.	.094	.073	.	.
OCT	.482	.135	.	.	.205	.233	.	.	.219	.233
NOV	.420	-.384	.	.	-.397	-.295	.	.	-.245	-.328
DEC	.404	.037	.	.	.247	.071	.	.	.065	.194
MAGNESIUM (MG/L)			DET'N LIMIT = .050		GUIDELINE = 30 (F2)					
JAN	4.900	5.000	4.800	5.000	.	.	4.900	5.000	.	.
FEB	4.800	4.600	4.600	4.600	.	.	4.700	4.400	.	.
MAR	5.100	5.100	5.100	5.100	.	.	5.100	5.000	.	.
APR	4.000	4.000	INR	INR	.	.	INR	INR	.	.
MAY	4.000	3.900	3.500	3.700	.	.	3.700	3.800	.	.
JUN	4.000	4.000	4.000	3.900	.	.	4.000	3.900	.	.
JUL	4.600	4.400	4.500	4.400	.	.	4.400	4.400	.	.
AUG	4.900	4.500	4.600	4.500	.	.	4.460	4.500	.	.
SEP	5.400	5.200	5.000	5.200	.	.	5.200	5.200	.	.

	WATER TREATMENT PLANT		DISTRIBUTION SYSTEM							
SITE TYPE	RAW	TREATED	SITE 1		SITE 3		SITE 2		SITE 4	
			STANDING	FREE FLOW	STANDING	FREE FLOW	STANDING	FREE FLOW	STANDING	FREE FLOW
OCT	5.100	5.100	.	.	5.400	5.100	.	.	5.100	5.300
NOV	5.000	5.100	.	.	5.500	5.500	.	.	5.500	5.600
DEC	5.000	4.900	.	.	5.100	5.000	.	.	4.900	4.800
SODIUM (MG/L)			DET'N LIMIT = .200		GUIDELINE = 200 (C3)					
JAN	6.000	6.200	6.400	6.200	.	.	6.200	6.200	.	.
FEB	6.800	6.800	7.000	6.600	.	.	7.200	6.600	.	.
MAR	8.200	8.000	8.000	8.200	.	.	8.800	8.200	.	.
APR	5.000	5.400	INR	INR	.	.	INR	INR	.	.
MAY	4.000	4.600	4.000	4.400	.	.	4.800	4.600	.	.
JUN	4.600	4.800	5.000	4.800	.	.	4.800	5.000	.	.
JUL	6.000	5.800	6.000	5.800	.	.	5.800	5.800	.	.
AUG	6.800	7.200	6.600	7.000	.	.	6.300	6.800	.	.
SEP	7.200	7.400	7.400	7.200	.	.	7.200	7.000	.	.
OCT	7.600	7.600	.	.	7.600	7.400	.	.	7.600	7.800
NOV	6.800	7.000	.	.	7.200	7.600	.	.	7.200	7.200
DEC	5.400	5.400	.	.	5.200	5.600	.	.	5.600	5.400
AMMONIUM TOTAL (MG/L)			DET'N LIMIT = 0.002		GUIDELINE = .05 (F2)					
JAN	.050	.010	.084	.016	.	.	.030	.016	.	.
FEB	.052	.010	.036	.010	.	.	.018	.010	.	.
MAR	.070	.012	.030	.014	.	.	.032	.014	.	.
APR	.010	.018	INR	INR	.	.	INR	INR	.	.
MAY	.044	.006 <T	.218	.012	.	.	.052	.016	.	.
JUN	.058	.012	.454	.018	.	.	.042	.022	.	.
JUL	.176	.014	.152	.024	.	.	.036	.024	.	.
AUG	.008 <T	.016	.036	.308	.	.	.116	.054	.	.
SEP	.010	.214	.010	.018	.	.	.022	.022	.	.
OCT	.090	.010	.	.	.142	.018	.	.	.054	.022
NOV	.066	.012	.	.	.012	.628	.	.	.032	.018

	WATER TREATMENT PLANT		DISTRIBUTION SYSTEM							
SITE TYPE	RAW	TREATED	SITE 1		SITE 3		SITE 2		SITE 4	
			STANDING	FREE FLOW	STANDING	FREE FLOW	STANDING	FREE FLOW	STANDING	FREE FLOW
DEC	.034	.016	.	.	.028	.020	.	.	.034	.014
NITRITE (MG/L)			DET'N LIMIT = 0.001		GUIDELINE = 1.000 (A1)					
JAN	.010	BDL	.002 <T	.001 <T	.	.	.002 <T	.001 <T	.	.
FEB	.008	.001 <T	.002 <T	BDL	.	.	.002 <T	.002 <T	.	.
MAR	.013	.001 <T	.003 <T	.002 <T	.	.	.002 <T	.001 <T	.	.
APR	.086	.002 <T	INR	INR	.	.	INR	INR	.	.
MAY	.006	.001 <T	.003 <T	.003 <T	.	.	.003 <T	.002 <T	.	.
JUN	.005	.001 <T	.003 <T	.001 <T	.	.	.002 <T	.001 <T	.	.
JUL	.013	.002 <T	.002 <T	.002 <T	.	.	.002 <T	.003 <T	.	.
AUG	.010	.0[illegible] <T	.002 <T	.003 <T	.	.	.002 <T	.001 <T	.	.
SEP	.006	.002 <T	.002 <T	.002 <T	.	.	.001 <T	.001 <T	.	.
OCT	.005	.001 <T	.	.	.002 <T	.001 <T	.	.	.002 <T	.002 <T
NOV	.016	.010	.	.	.009	.005	.	.	.010	.009
DEC	.006	.001 <T	.	.	.002 <T	.002 <T	.	.	.002 <T	.002 <T
TOTAL NITRATES (MG/L)			DET'N LIMIT = .020		GUIDELINE = 10.000 (A1)					
JAN	.345	.345	.640	.335	.	.	.400	.335	.	.
FEB	.335	.325	.430	.310	.	.	.425	.365	.	.
MAR	.440	.430	.500	.430	.	.	.505	.435	.	.
APR	.550	.430	INR	INR	.	.	INR	INR	.	.
MAY	.100	.100	.400	.100	.	.	.105	.100	.	.
JUN	BDL	BDL	.515	BDL	.	.	.020 <T	BDL	.	.
JUL	.040 <T	.030 <T	.300	.080 <T	.	.	.040 <T	.035 <T	.	.
AUG	.355	BDL	BDL	.320	.	.	.035 <T	BDL	.	.
SEP	.025 <T	.340	BDL	.040 <T	.	.	.025 <T	.020 <T	.	.
OCT	.030 <T	.035 <T	.	.	.285	.030 <T	.	.	.075 <T	.035 <T
NOV	.125	.125	.	.	.125	1.120	.	.	.140	.120
DEC	.100	.105	.	.	.135	.105	.	.	.110	.110

	WATER TREATMENT PLANT		DISTRIBUTION SYSTEM							
SITE			SITE 1		SITE 3		SITE 2		SITE 4	
TYPE	RAW	TREATED	STANDING	FREE FLOW	STANDING	FREE FLOW	STANDING	FREE FLOW	STANDING	FREE FLOW
NITROGEN TOT KJELD (MG/L)			DET'N LIMIT = .020		GUIDELINE = N/A					
JAN	.430	.270	.490	.300	.	.	.380	.320	.	.
FEB	.590	.370	.460	.380	.	.	.360	.350	.	.
MAR	.490	.290	.420	.310	.	.	.380	.340	.	.
APR	.460	.290	INR	INR	.	.	INR	INR	.	.
MAY	.760	.200	.670	.210	.	.	.450	.210	.	.
JUN	.560	.280	.900	.270	.	.	.380	.260	.	.
JUL	.780	.360	.650	.370	.	.	.410	.340	.	.
AUG	.900	.370	.390	.670	.	.	.530	.410	.	.
SEP	.950	.320	.590	.350	.	.	.400	.340	.	.
OCT	.760	.280	.	.	.440	.190	.	.	.280	.250
NOV	.690	.270	.	.	.270	1.130	.	.	.280	.280
DEC	.510	.270	.	.	.330	.270	.	.	.300	.260
PH (DIMENSIONLESS)			DET'N LIMIT = N/A		GUIDELINE = 6.5-8.5(A4)					
JAN	8.270	7.750	7.970	7.920	.	.	8.040	7.810	.	.
FEB	8.100	7.700	7.860	7.780	.	.	7.740	7.660	.	.
MAR	8.130	7.980	7.950	7.800	.	.	7.920	7.820	.	.
APR	8.180	7.710	INR	INR	.	.	INR	INR	.	.
MAY	8.220	7.980	7.990	7.880	.	.	7.870	7.820	.	.
JUN	8.350	8.140	8.130	8.150	.	.	8.090	8.100	.	.
JUL	8.150	7.690	7.790	7.710	.	.	7.760	7.670	.	.
AUG	8.100	7.640	7.660	7.820	.	.	7.700	7.600	.	.
SEP	8.440	8.120	8.120	8.030	.	.	8.040	8.030	.	.
OCT	8.280	8.090	.	.	8.150	8.170	.	.	8.160	8.170
NOV	8.170	7.510	.	.	7.500	7.610	.	.	7.640	7.580
DEC	8.210	7.970	.	.	8.190	8.010	.	.	8.010	8.150
PHOSPHORUS FIL REACT (MG/L)			DET'N LIMIT = .0005		GUIDELINE = N/A					
JAN	.002 <T	.001 <T	.	.	.	.	.	.	.	.

	WATER TREATMENT PLANT		DISTRIBUTION SYSTEM							
SITE TYPE	RAW	TREATED	SITE 1		SITE 3		SITE 2		SITE 4	
			STANDING	FREE FLOW	STANDING	FREE FLOW	STANDING	FREE FLOW	STANDING	FREE FLOW
FEB	.002	.001 <T	.	.	.	.	.	.	.	.
MAR	.002 <T	.000 <T	.	.	.	.	.	.	.	.
APR	.004	.001 <T	.	.	.	.	.	.	.	.
MAY	.000 <T	BDL	.	.	.	.	.	.	.	.
JUN	.004	.001 <T	.	.	.	.	.	.	.	.
JUL	.013	.002 <T	.	.	.	.	.	.	.	.
AUG	.008	.001 <T	.	.	.	.	.	.	.	.
SEP	.001 <T	.001 <T	.	.	.	.	.	.	.	.
OCT	.004	.002 <T	.	.	.	.	.	.	.	.
NOV	.001 <T	.000 <T	.	.	.	.	.	.	.	.
DEC	.002 <T	.001 <T	.	.	.	.	.	.	.	.
PHOSPHORUS TOTAL (MG/L)			DET'N LIMIT = .002		GUIDELINE = .40 (F2)					
JAN	.012	.003 <T	.	.	.	.	.	.	.	.
FEB	.017	.003 <T	.	.	.	.	.	.	.	.
MAR	.013	.003 <T	.	.	.	.	.	.	.	.
APR	.027	BDL	.	.	.	.	.	.	.	.
MAY	.024	.002 <T	.	.	.	.	.	.	.	.
JUN	.035	.005 <T	.	.	.	.	.	.	.	.
JUL	.062	.011	.	.	.	.	.	.	.	.
AUG	.082	.010	.	.	.	.	.	.	.	.
SEP	.045	BDL	.	.	.	.	.	.	.	.
OCT	.045	.004 <T	.	.	.	.	.	.	.	.
NOV	.027	BDL	.	.	.	.	.	.	.	.
DEC	.021	.002 <T	.	.	.	.	.	.	.	.
TOTAL SOLIDS (MG/L)			DET'N LIMIT = 1.		GUIDELINE = 500 (A3)					
JAN	200 CRO	209 CRO	205 CRO		202 CRO		204 CRO		206 CRO	
SULPHATE (MG/L)			DET'N LIMIT = .200		GUIDELINE = 500. (A3)					

	WATER TREATMENT PLANT		DISTRIBUTION SYSTEM							
SITE TYPE	RAW	TREATED	SITE 1		SITE 3		SITE 2		SITE 4	
			STANDING	FREE FLOW	STANDING	FREE FLOW	STANDING	FREE FLOW	STANDING	FREE FLOW
AUG	13.530	34.940	34.920	35.610	.	.	35.000	35.530	.	.
SEP	12.860	34.940	34.760	35.650	.	.	35.690	34.850	.	.
OCT	14.200	36.300	.	.	35.600	35.600	.	.	35.600	35.500
NOV	14.620	35.360	.	.	34.780	35.290	.	.	34.190	34.180
DEC	19.500	39.000	.	.	40.000	42.500	.	.	42.000	38.500
TURBIDITY (FTU)			DET'N LIMIT = .02		GUIDELINE = 1.00 (A1)					
JAN	.720	.130	.400	.350	.	.	.320	.340	.	.
FEB	1.220	.280	.520	.230	.	.	.330	.280	.	.
MAR	.750	.130	.480	.160	.	.	.220	.200	.	.
APR	3.800	.140	INR	INR	.	.	INR	INR	.	.
MAY	2.200	.040 <T	.920	.110	.	.	.640	.150	.	.
JUN	3.100	.290	.910	.400	.	.	.740	.300	.	.
JUL	6.100	.810	1.500	.740	.	.	.890	.690	.	.
AUG	10.000	1.000	.700	.750	.	.	.830	.580	.	.
SEP	6.700	.480	.530	.540	.	.	.410	.420	.	.
OCT	5.200	.490	.	.	.590	.560	.	.	.700	.740
NOV	5.200	.290	.	.	.270	.560	.	.	.470	.440
DEC	5.100	.400	.	.	.630	.780	.	.	.520	.460

	WATER TREATMENT PLANT		DISTRIBUTION SYSTEM							
SITE	RAW	TREATED	SITE 1		SITE 3		SITE 2		SITE 4	
TYPE			STANDING	FREE FLOW	STANDING	FREE FLOW	STANDING	FREE FLOW	STANDING	FREE FLOW
METALS										
SILVER (UG/L)			DET'N LIMIT = .020		GUIDELINE = 50. (AT)					
JAN	BDL	BDL	.600	.050 <T	.	.	1.100	BDL	.	.
FEB	BDL	BDL	.100 <T	BDL	.	.	3.200	.050 <T	.	.
MAR	BDL	BDL	.070 <T	ITS	.	.	.360 <T	BDL	.	.
APR	BDL	BDL	.050 <T	BDL	.	.	.080 <T	BDL	.	.
MAY	BDL	.050 <T	.050 <T	BDL	.	.	.030 <T	BDL	.	.
JUN	BDL	BDL	ITS	ITS	.	.	.040 <T	.050 <T	.	.
JUL	BDL	BDL	.030 <T	.070 <T	.	.	.120 <T	BDL	.	.
AUG	BDL	BDL	BDL	BDL	.	.	BDL	1.100	.	.
SEP	.090 <T	.030 <T	BDL	BDL	.	.	.410 <T	BDL	.	.
OCT	BDL	BDL	.	.	BDL	BDL	.	.	.030 <T	BDL
NOV	BDL	.060 <T	.	.	.030 <T	BDL	.	.	BDL	BDL
DEC	BDL	BDL	.	.	.080 <T	BDL	.	.	BDL	BDL
ALUMINUM (UG/L)			DET'N LIMIT = .050		GUIDELINE = 100.(AA)					
JAN	23.000	160.000	140.000	140.000	.	.	120.000	130.000	.	.
FEB	42.000	210.000	240.000	180.000	.	.	180.000	180.000	.	.
MAR	17.000	170.000	180.000	ITS	.	.	120.000	140.000	.	.
APR	120.000	150.000	230.000	130.000	.	.	120.000	140.000	.	.
MAY	40.000	40.000	230.000	40.000	.	.	72.000	52.000	.	.
JUN	88.000	150.000	ITS	ITS	.	.	140.000	130.000	.	.
JUL	100.000	200.000	290.000	170.000	.	.	180.000	170.000	.	.
AUG	80.000	230.000	190.000	230.000	.	.	170.000	230.000	.	.
SEP	110.000	140.000	160.000	150.000	.	.	120.000	120.000	.	.
OCT	98.000	150.000	.	.	150.000	150.000	.	.	110.000	120.000
NOV	98.000	160.000	.	.	150.000	150.000	.	.	110.000	140.000
DEC	57.000	180.000	.	.	140.000	150.000	.	.	150.000	180.000
ARSENIC (UG/L)			DET'N LIMIT = 0.050		GUIDELINE = 50.0 (AT)					
JAN	.440 <T	.470 <T	.400 <T	.300 <T	.	.	.400 <T	.380 <T	.	.

	WATER TREATMENT PLANT		DISTRIBUTION SYSTEM							
SITE TYPE	RAW	TREATED	SITE 1		SITE 3		SITE 2		SITE 4	
			STANDING	FREE FLOW	STANDING	FREE FLOW	STANDING	FREE FLOW	STANDING	FREE FLOW
FEB	.450 <1	.370 <1	.470 <1	.400 <1	.	.	.490 <1	.350 <1	.	.
MAR	.200 <1	BDL	BDL	11%	.	.	BDL	BDL	.	.
APR	BDL	BDL	BDL	BDL	.	.	BDL	BDL	.	.
MAY	.400 <1	BDL	.110 <1	.070 <1	.	.	.170 <1	BDL	.	.
JUN	1.300	.360 <1	11%	11%	.	.	.260 <1	.260 <1	.	.
JUL	.320 <1	.370 <1	.070 <1	.290 <1	.	.	.210 <1	.150 <1	.	.
AUG	1.300	.910 <1	.960 <1	.980 <1	.	.	1.000 <1	.860 <1	.	.
SEP	2.000	.800 <1	.880 <1	.600 <1	.	.	.610 <1	.730 <1	.	.
OCT	1.400	.780 <1	.	.	.920 <1	.670 <1	.	.	.690 <1	.830 <1
NOV	1.100	.340 <1	.	.	.550 <1	.290 <1	.	.	.290 <1	.340 <1
DEC	.590 <1	.510 <1	.	.	.570 <1	.360 <1	.	.	.580 <1	.520 <1
BARIUM (UG/L)			DET'N LIMIT = 0.020		GUIDELINE = 1000. (A1)					
JAN	37.000	34.000	38.000	35.000	.	.	40.000	33.000	.	.
FEB	38.000	35.000	42.000	36.000	.	.	41.000	35.000	.	.
MAR	35.000	34.000	35.000	11%	.	.	34.000	32.000	.	.
APR	36.000	31.000	34.000	31.000	.	.	34.000	32.000	.	.
MAY	33.000	31.000	34.000	31.000	.	.	34.000	29.000	.	.
JUN	36.000	32.000	11%	11%	.	.	33.000	32.000	.	.
JUL	35.000	34.000	35.000	35.000	.	.	35.000	35.000	.	.
AUG	37.000	34.000	33.000	35.000	.	.	34.000	31.000	.	.
SEP	41.000	37.000	36.000	36.000	.	.	37.000	36.000	.	.
OCT	46.000	42.000	.	.	42.000	42.000	.	.	43.000	43.000
NOV	40.000	37.000	.	.	39.000	37.000	.	.	39.000	37.000
DEC	37.000	35.000	.	.	40.000	35.000	.	.	37.000	36.000
BORON (MG/L)			DET'N LIMIT = 0.200		GUIDELINE = 5000. (A1)					
JAN	NAV	NAV	.	.	.	.	.	.	.	.
JAN	.	.	13.000 <1	11.000 <1	.	.	13.000 <1	10.000 <1	.	.

	WATER TREATMENT PLANT		DISTRIBUTION SYSTEM							
SITE TYPE	RAW	TREATED	SITE 1		SITE 3		SITE 2		SITE 4	
			STANDING	FREE FLOW	STANDING	FREE FLOW	STANDING	FREE FLOW	STANDING	FREE FLOW
FEB	14.000 <1	12.000 <1	14.000 <1	12.000 <1	.	.	16.000 <1	12.000 <1	.	.
MAR	17.000 <1	15.000 <1	12.000 <1	ITS	.	.	12.000 <1	11.000 <1	.	.
APR	15.000 <1	12.000 <1	20.000	13.000 <1	.	.	12.000 <1	11.000 <1	.	.
MAY	28.000	25.000	9.500 <1	8.600 <1	.	.	9.500 <1	8.500 <1	.	.
JUN	37.000	27.000	ITS	ITS	.	.	15.000 <1	13.000 <1	.	.
JUL	18.000 <1	16.000 <1	23.000	15.000 <1	.	.	18.000 <1	16.000 <1	.	.
AUG	44.000	43.000	22.000	38.000	.	.	41.000	28.000	.	.
SEP	59.000	56.000	52.000	57.000	.	.	200.000	52.000	.	.
OCT	51.000	50.000	.	.	51.000	50.000	.	.	56.000	49.000
NOV	38.000	36.000	.	.	33.000	34.000	.	.	33.000	37.000
DEC	47.000	45.000	.	.	46.000	17.000 <1	.	.	41.000	42.000
BERYLLIUM (UG/L)			DET'N LIMIT = 0.010		GUIDELINE = .20 (H)					
JAN	BDL	BDL	BDL	BDL	.	.	BDL	BDL	.	.
FEB	.010 <1	BDL	BDL	BDL	.	.	BDL	BDL	.	.
MAR	.020 <1	.010 <1	.050 <1	ITS	.	.	BDL	.020 <1	.	.
APR	BDL	BDL	BDL	BDL	.	.	BDL	BDL	.	.
MAY	.070 <1	BDL	BDL	BDL	.	.	BDL	BDL	.	.
JUN	.040 <1	BDL	ITS	ITS	.	.	BDL	BDL	.	.
JUL	.020 <1	.020 <1	.020 <1	.050 <1	.	.	BDL	BDL	.	.
AUG	.020 <1	.050 <1	BDL	.050 <1	.	.	BDL	BDL	.	.
SEP	.080 <1	.020 <1	.050 <1	.040 <1	.	.	BDL	BDL	.	.
OCT	.080 <1	.070 <1	.	.	.070 <1	.070 <1	.	.	.040 <1	.040 <1
NOV	.090 <1	.060 <1	.	.	BDL	.090 <1	.	.	BDL	.090 <1
DEC	.160 <1	.120 <1	.	.	.110 <1	.100 <1	.	.	.120 <1	.170 <1
CHROMIUM (UG/L)			DET'N LIMIT = 0.050		GUIDELINE = 5.000 (A1)					
JAN	.250 <1	BDL	.090 <1	BDL	.	.	.120 <1	BDL	.	.
FEB	.250 <1	BDL	.060 <1	BDL	.	.	BDL	BDL	.	.
MAR	.270 <1	BDL	BDL	ITS	.	.	BDL	BDL	.	.

	WATER TREATMENT PLANT		DISTRIBUTION SYSTEM							
SITE TYPE	RAW	TREATED	SITE 1		SITE 3		SITE 2		SITE 4	
			STANDING	FREE FLOW	STANDING	FREE FLOW	STANDING	FREE FLOW	STANDING	FREE FLOW
APR	.310 <1	BDL	.100 <1	BDL	.	.	.160 <1	BDL	.	.
MAY	.130 <1	BDL	.110 <1	BDL	.	.	.300 <1	BDL	.	.
JUN	.240 <1	BDL	11S	11S	.	.	.150 <1	BDL	.	.
JUL	.970	.080 <1	.080 <1	.080 <1	.	.	.080 <1	BDL	.	.
AUG	.140 <1	BDL	BDL	BDL	.	.	BDL	.070 <1	.	.
SEP	.580	BDL	.090 <1	BDL	.	.	BDL	BDL	.	.
OCT	.110 <1	BDL	.	.	.090 <1	BDL	.	.	.580 <1	BDL
NOV	.230 <1	BDL	.	.	BDL	BDL	.	.	.070 <1	BDL
DEC	.150 <1	BDL	.	.	BDL	BDL	.	.	BDL	BDL
CHROMIUM (UG/L)			DET'N LIMIT = 0.020		GUIDELINE = 1000 (N)					
JAN	.080 <1	.070 <1	.730 <1	.080 <1	.	.	.120 <1	.060 <1	.	.
FEB	.050 <1	BDL	.560 <1	.020 <1	.	.	.130 <1	.030 <1	.	.
MAR	BDL	BDL	.240 <1	11S	.	.	.100 <1	BDL	.	.
APR	.750 <1	.650 <1	.860	.620 <1	.	.	.690 <1	.620 <1	.	.
MAY	.070 <1	.040 <1	.190 <1	.030 <1	.	.	.180 <1	BDL	.	.
JUN	.130 <1	.080 <1	11S	11S	.	.	.150 <1	.090 <1	.	.
JUL	.100 <1	.110 <1	.100 <1	.110 <1	.	.	.150 <1	.080 <1	.	.
AUG	.240 <1	.150 <1	.190 <1	.190 <1	.	.	.170 <1	.160 <1	.	.
SEP	.210 <1	.140 <1	.090 <1	.080 <1	.	.	.130 <1	.120 <1	.	.
OCT	.300 <1	.230 <1	.	.	.220 <1	.200 <1	.	.	.240 <1	.260 <1
NOV	.250 <1	.190 <1	.	.	.300 <1	.220 <1	.	.	.250 <1	.210 <1
DEC	.210 <1	.220 <1	.	.	2.100	.300 <1	.	.	.180 <1	.260 <1
CHROMIUM (UG/L)			DET'N LIMIT = 0.100		GUIDELINE = 50. (A)					
JAN	.110 <1	BDL	.180 <1	BDL	.	.	.180 <1	.480 <1	.	.
FEB	.930 <1	.380 <1	.330 <1	.300 <1	.	.	.440 <1	.330 <1	.	.
MAR	1.600	1.200	.450 <1	11S	.	.	.340 <1	.380 <1	.	.
APR	1.400	.600 <1	.390 <1	.220 <1	.	.	.490 <1	.290 <1	.	.
MAY	4.000	3.600	.600 <1	.590 <1	.	.	.490 <1	.430 <1	.	.

	WATER TREATMENT PLANT		DISTRIBUTION SYSTEM							
SITE	RAW	TREATED	SITE 1		SITE 3		SITE 2		SITE 4	
TYPE			STANDING	FREE FLOW	STANDING	FREE FLOW	STANDING	FREE FLOW	STANDING	FREE FLOW
JAN	4.300	3.100	ITS	ITS	.	.	.780 <T	.530 <T	.	.
JUL	.870 <T	.290 <T	.430 <T	.500 <T	.	.	.920 <T	.620 <T	.	.
AUG	4.100	3.600	1.100	3.400	.	.	3.900	1.700	.	.
SEP	4.300	4.400	3.900	3.900	.	.	4.200	4.000	.	.
OCT	6.100	5.600	.	.	5.900	5.800	.	.	2.800	5.600
NOV	6.600	6.500	.	.	5.500	5.800	.	.	4.500	6.400
DEC	6.100	5.800	.	.	5.500	.830 <T	.	.	5.300	5.800
COPPER (UG/L)		DET'N LIMIT = .100		QUIDELINE = 1000 (AS)						
JAN	1.500	.540 <T	72.000	24.000	.	.	69.000	5.100	.	.
FEB	2.400	.650 <T	89.000	37.000	.	.	67.000	4.700	.	.
MAR	1.600	.520 <T	65.000	ITS	.	.	50.000	4.100	.	.
APR	2.200	.840 <T	91.000	20.000	.	.	63.000	6.000	.	.
MAY	1.100	.510 <T	88.000	38.000	.	.	81.000	4.500	.	.
JUN	1.700	.610 <T	ITS	ITS	.	.	49.000	7.000	.	.
JUL	1.800	1.100	140.000	37.000	.	.	51.000	9.800	.	.
AUG	2.100	.650 <T	53.000	63.000	.	.	12.000	57.000	.	.
SEP	2.000	.830 <T	93.000	40.000	.	.	59.000	17.000	.	.
OCT	1.200	.700 <T	.	.	54.000	7.300	.	.	250.000	58.000
NOV	1.700	.690 <T	.	.	61.000	6.800	.	.	410.000	27.000
DEC	1.100	.680 <T	.	.	150.000	20.000	.	.	36.000	5.800
IRON (UG/L)		DET'N LIMIT = 4.000		QUIDELINE = 300. (AS)						
JAN	39.000 <T	BDL	30.000 <T	28.000 <T	.	.	23.000 <T	32.000 <T	.	.
FEB	66.000	9.000 <T	65.000	27.000 <T	.	.	29.000 <T	36.000 <T	.	.
MAR	43.000	10.000 <T	75.000	ITS	.	.	27.000 <T	34.000 <T	.	.
APR	150.000	7.000 <T	82.000	31.000 <T	.	.	39.000 <T	46.000	.	.
MAY	67.000	5.100 <T	120.000	26.000 <T	.	.	47.000 <T	57.000	.	.
JUN	130.000	9.400 <T	ITS	ITS	.	.	52.000	69.000	.	.
JUL	100.000	21.000 <T	110.000	49.000 <T	.	.	59.000	65.000	.	.

	WATER TREATMENT PLANT		DISTRIBUTION SYSTEM							
SITE	RAW	TREATED	SITE 1		SITE 3		SITE 2		SITE 4	
TYPE			STANDING	FREE FLOW	STANDING	FREE FLOW	STANDING	FREE FLOW	STANDING	FREE FLOW
AUG	210.000	8.300 <T	57.000	89.000	.	.	52.000	78.000	.	.
SEP	170.000	7.800 <T	66.000	34.000 <T	.	.	49.000 <T	66.000	.	.
OCT	100.000	5.400 <T	.	.	57.000	52.000	.	.	59.000	64.000
NOV	84.000	BDL	.	.	77.000	38.000 <T	.	.	65.000	97.000
DEC	73.000	7.300 <T	.	.	61.000	98.000	.	.	31.000 <T	32.000 <T
MERCURY (UG/L)			DET'N LIMIT = 0.010		GUIDELINE = 1.000 (A1)					
JAN	.070	.090	.	.060	.	.	.	.020	.	.
FEB	.040	.060	.	.010	.	.	.	.010	.	.
MAR	.100	.090	.	.010	.	.	.	.070	.	.
APR	.130	.150	.	ISS	.	.	.	ISS	.	.
MAY	.150	.190	.	BDL	.	.	.	BDL	.	.
JUN	BDL	BDL	.	.020 <T	.	.	.	BDL	.	.
JUL	BDL	BDL	.	.020 <T	.	.	.	BDL	.	.
AUG	.020 <T	BDL	.	.020 <T	.	.	.	.020 <T	.	.
SEP	BDL	BDL	.	.030 <T	.	.	.	.020 <T	.	.
OCT	BDL	BDL	.	.	.	.020 <T	.	.	.	BDL
NOV	BDL	BDL	.	.	.	.020 <T	.	.	.	BDL
DEC	BDL	BDL	.	.	.	.040 <T	.	.	.	.040 <T
MANGANESE (UG/L)			DET'N LIMIT = .050		GUIDELINE = 50.0 (A3)					
JAN	7.400	2.500	4.900	4.100	.	.	4.900	4.000	.	.
FEB	11.000	2.900	5.700	3.500	.	.	4.100	3.300	.	.
MAR	8.100	1.600	4.700	ISS	.	.	3.100	3.100	.	.
APR	21.000	1.400	4.800	3.200	.	.	3.500	3.400	.	.
MAY	25.000	.980	4.800	2.400	.	.	3.300	3.300	.	.
JUN	49.000	3.700	ISS	ISS	.	.	4.800	5.300	.	.
JUL	61.000	5.600	9.200	7.500	.	.	6.000	7.300	.	.
AUG	110.000	4.300	7.600	7.800	.	.	6.000	6.900	.	.
SEP	80.000	1.900	5.700	4.600	.	.	5.000	5.700	.	.

	WATER TREATMENT PLANT		DISTRIBUTION SYSTEM							
SITE TYPE	RAW	TREATED	SITE 1		SITE 3		SITE 2		SITE 4	
			STANDING	FREE FLOW	STANDING	FREE FLOW	STANDING	FREE FLOW	STANDING	FREE FLOW
OCT	55.000	3.700	.	.	6.000	5.800	.	.	5.000	5.500
NOV	25.000	2.900	.	.	5.900	4.200	.	.	4.800	5.900
DEC	13.000	1.200	.	.	3.000	3.800	.	.	2.600	2.100
MOLYBDENUM (UG/L)			DET'N LIMIT = 0.020		GUIDELINE = 500 (H)					
JAN	.370 <1	.410 <1	.460 <1	.380 <1	.	.	.370 <1	.360 <1	.	.
FEB	.300 <1	.330 <1	.470 <1	.340 <1	.	.	.350 <1	.340 <1	.	.
MAR	.280 <1	.330 <1	.380 <1	118	.	.	.360 <1	.330 <1	.	.
APR	.210 <1	.200 <1	.270 <1	.280 <1	.	.	.340 <1	.270 <1	.	.
MAY	.240 <1	.290 <1	.270 <1	.260 <1	.	.	.310 <1	.250 <1	.	.
JUN	.230 <1	.340 <1	118	118	.	.	.300 <1	.360 <1	.	.
JUL	.340 <1	.480 <1	.420 <1	.480 <1	.	.	.440 <1	.450 <1	.	.
AUG	.340 <1	.580	.470 <1	.630 <1	.	.	.450 <1	.390 <1	.	.
SEP	.480 <1	.570	.550	.500 <1	.	.	.500 <1	.550	.	.
OCT	.400 <1	.470 <1	.	.	.520	.510	.	.	.550	.470 <1
NOV	.420 <1	.550	.	.	.530	.520	.	.	.550	.460 <1
DEC	.370 <1	.630 <1	.	.	.470 <1	.470 <1	.	.	.630 <1	.370 <1
NICKEL (UG/L)			DET'N LIMIT = 0.100		GUIDELINE = 50. (F3)					
JAN	.660 <1	.550 <1	500.000	.820 <1	.	.	9.600	.700 <1	.	.
FEB	BDL	BDL	270.000	BDL	.	.	5.500	BDL	.	.
MAR	BDL	BDL	140.000	118	.	.	2.900	.550 <1	.	.
APR	2.100	2.100	95.000	1.800	.	.	4.200	1.500	.	.
MAY	.720 <1	.440 <1	56.000	.290 <1	.	.	2.600	.210 <1	.	.
JUN	.310 <1	.260 <1	118	118	.	.	2.500	.510 <1	.	.
JUL	.910 <1	.750 <1	5.400	1.000 <1	.	.	2.900	.810 <1	.	.
AUG	.590 <1	.380 <1	.500 <1	.610 <1	.	.	.380 <1	2.600	.	.
SEP	.530 <1	.160 <1	.720 <1	BDL	.	.	2.900	.510 <1	.	.
OCT	2.400	1.700 <1	.	.	32.000	1.600 <1	.	.	3.100	1.900 <1
NOV	BDL	BDL	.	.	70.000	BDL	.	.	4.200	BDL

	WATER TREATMENT PLANT		DISTRIBUTION SYSTEM							
SITE			SITE 1		SITE 3		SITE 2		SITE 4	
TYPE	RAW	TREATED	STANDING	FREE FLOW	STANDING	FREE FLOW	STANDING	FREE FLOW	STANDING	FREE FLOW
DEC	1.500 <T	1.200 <T	.	.	62.000	1.500 <T	.	.	2.800	1.600 <T
LEAD (UG/L)			DET'N LIMIT = 0.050		GUIDELINE = 50. (A1)					
JAN	.320	.050 <T	2.500	.640	.	.	4.000	.320	.	.
FEB	.310	.060 <T	2.500	.920	.	.	2.700	.230	.	.
MAR	.350	BDL	1.600	IIS	.	.	2.100	.170 <T	.	.
APR	.410	BDL	2.800	.510	.	.	3.500	.260	.	.
MAY	.640	.040 <T	4.200	.910	.	.	6.100	.380	.	.
JUN	.650	.060 <T	IIS	IIS	.	.	2.700	.410	.	.
JUL	1.300	.080 <T	5.100	3.100	.	.	2.400	.810	.	.
AUG	1.100	.040 <T	1.400	3.600	.	.	.700	3.600	.	.
SEP	.950	.060 <T	4.600	1.100	.	.	2.300	.750	.	.
OCT	.890	.030 <T	.	.	5.000	.200 <T	.	.	4.100	1.900
NOV	.770	.070 <T	.	.	4.700	.120 <T	.	.	4.700	.340
DEC	.610	.050 <T	.	.	.730	.120 <T	.	.	.400	.080 <T
ANTIMONY (UG/L)			DET'N LIMIT = .050		GUIDELINE = 146. (D4)					
JAN	.100 <T	.090 <T	.110 <T	.100 <T	.	.	.140 <T	.120 <T	.	.
FEB	.090 <T	.110 <T	.140 <T	.110 <T	.	.	.140 <T	.120 <T	.	.
MAR	.080 <T	.090 <T	.080 <T	IIS	.	.	.070 <T	.090 <T	.	.
APR	.100 <T	.070 <T	.140 <T	.090 <T	.	.	.080 <T	.120 <T	.	.
MAY	.080 <T	.100 <T	.130 <T	.050 <T	.	.	.160 <T	.120 <T	.	.
JUN	.070 <T	.070 <T	IIS	IIS	.	.	.090 <T	.080 <T	.	.
JUL	.120 <T	.140 <T	.130 <T	.190 <T	.	.	.190 <T	.180 <T	.	.
AUG	.480	.440	.530	.600	.	.	.560	.590	.	.
SEP	.440	.420	.490	.430	.	.	.560	.440	.	.
OCT	.540	.620	.	.	.530	.640	.	.	.610	.670
NOV	.510	.560	.	.	.560	.520	.	.	.590	.520
DEC	.260	.230	.	.	.360	.430	.	.	.260	.240

	WATER TREATMENT PLANT		DISTRIBUTION SYSTEM							
SITE TYPE	RAW	TREATED	SITE 1		SITE 3		SITE 2		SITE 4	
			STANDING	FREE FLOW	STANDING	FREE FLOW	STANDING	FREE FLOW	STANDING	FREE FLOW
SELENIUM (UG/L)			DET'N LIMIT = 0.200		GUIDELINE = 10. (A1)					
JAN	BDL	.440 <T	.920 <T	.390 <T	.	.	.290 <T	.720 <T	.	.
FEB	.520 <T	.720 <T	.520 <T	.310 <T	.	.	.240 <T	.630 <T	.	.
MAR	.390 <T	BDL	.370 <T	IIS	.	.	.390 <T	.650 <T	.	.
APR	1.400 <T	.900 <T	.660 <T	.750 <T	.	.	.870 <T	1.100 <T	.	.
MAY	1.100 <T	1.700 <T	.400 <T	1.100 <T	.	.	.600 <T	.700 <T	.	.
JUN	.490 <T	.770 <T	IIS	IIS	.	.	.870 <T	1.200 <T	.	.
JUL	1.200 <T	1.200 <T	.530 <T	1.600 <T	.	.	1.500 <T	1.700 <T	.	.
AUG	.370 <T	1.100 <T	1.400 <T	.760 <T	.	.	.590 <T	1.600 <T	.	.
SEP	.470 <T	.890 <T	1.800 <T	1.400 <T	.	.	1.480 <T	.610 <T	.	.
OCT	.740 <T	1.500 <T	.	.	2.300 <T	3.300 <T	.	.	1.500 <T	2.100 <T
NOV	.850 <T	1.000 <T	.	.	1.300 <T	.930 <T	.	.	.690 <T	1.800 <T
DEC	.310 <T	BDL	.	.	.570 <T	.410 <T	.	.	1.000 <T	.260 <T
STRONTIUM (UG/L)			DET'N LIMIT = .050		GUIDELINE = 2000.(H)					
JAN	150.000	150.000	150.000	150.000	.	.	160.000	150.000	.	.
FEB	160.000	150.000	170.000	160.000	.	.	170.000	150.000	.	.
MAR	140.000	140.000	160.000	IIS	.	.	150.000	150.000	.	.
APR	160.000	140.000	150.000	140.000	.	.	140.000	140.000	.	.
MAY	130.000	120.000	130.000	120.000	.	.	130.000	110.000	.	.
JUN	150.000	140.000	IIS	IIS	.	.	140.000	130.000	.	.
JUL	140.000	140.000	140.000	140.000	.	.	140.000	140.000	.	.
AUG	140.000	140.000	150.000	140.000	.	.	150.000	130.000	.	.
SEP	180.000	170.000	170.000	160.000	.	.	170.000	160.000	.	.
OCT	170.000	160.000	.	.	150.000	150.000	.	.	150.000	160.000
NOV	150.000	150.000	.	.	150.000	150.000	.	.	150.000	150.000
DEC	130.000	130.000	.	.	130.000	130.000	.	.	130.000	120.000
TITANIUM (UG/L)			DET'N LIMIT = .050		GUIDELINE = N/A					
JAN	5.400	3.500	4.600	4.100	.	.	3.600	3.500	.	.

	WATER TREATMENT PLANT		DISTRIBUTION SYSTEM							
SITE	RAW	TREATED	SITE 1		SITE 3		SITE 2		SITE 4	
TYPE			STANDING	FREE FLOW	STANDING	FREE FLOW	STANDING	FREE FLOW	STANDING	FREE FLOW
FEB	12.000	9.000	9.000	8.600	.	.	9.000	8.800	.	.
MAR	12.000	10.000	11.000	IIS	.	.	10.000	11.000	.	.
APR	22.000	15.000	16.000	15.000	.	.	15.000	14.000	.	.
MAY	4.500	2.900	3.400	2.500	.	.	3.900	3.200	.	.
JUN	7.100	3.600	IIS	IIS	.	.	3.900	3.500	.	.
JUL	10.000	4.900	5.300	4.300	.	.	4.800	4.900	.	.
AUG	16.000	12.000	12.000	13.000	.	.	12.000	12.000	.	.
SEP	8.600	6.400	7.000	6.300	.	.	7.300	5.500	.	.
OCT	4.500	3.600	.	.	3.800	3.600	.	.	3.600	3.700
NOV	3.400	2.000 <T	.	.	2.200	2.000 <T	.	.	2.100	2.100
DEC	5.200	4.000	.	.	4.500	3.700	.	.	4.100	4.100
THALLIUM (UG/L)			DET'N LIMIT = .010		GUIDELINE = 13. (D4)					
JAN	.010 <T	.010 <T	.020 <T	.010 <T	.	.	.010 <T	.010 <T	.	.
FEB	.030 <T	.010 <T	.010 <T	.010 <T	.	.	.010 <T	BDL	.	.
MAR	.010 <T	BDL	.010 <T	IIS	.	.	BDL	BDL	.	.
APR	BDL	BDL	BDL	BDL	.	.	BDL	BDL	.	.
MAY	BDL	BDL	BDL	BDL	.	.	BDL	BDL	.	.
JUN	BDL	BDL	IIS	IIS	.	.	BDL	BDL	.	.
JUL	BDL	BDL	BDL	BDL	.	.	BDL	BDL	.	.
AUG	.030 <T	BDL	BDL	BDL	.	.	BDL	BDL	.	.
SEP	BDL	BDL	BDL	BDL	.	.	BDL	BDL	.	.
OCT	BDL	BDL	.	.	BDL	BDL	.	.	BDL	BDL
NOV	.020 <T	BDL	.	.	BDL	BDL	.	.	BDL	BDL
DEC	BDL	BDL	.	.	BDL	BDL	.	.	BDL	BDL
URANIUM (UG/L)			DET'N LIMIT = .020		GUIDELINE = 20. (A2)					
JAN	.400	.200	.200	.200	.	.	.200	.200	.	.
FEB	.370	.230	.250	.230	.	.	.280	.260	.	.
MAR	.310	.250	.190 <T	IIS	.	.	.210	.210	.	.

	WATER TREATMENT PLANT		DISTRIBUTION SYSTEM							
SITE					SITE 3		SITE 2		SITE 4	
TYPE	RAW	TREATED	SITE 1 STANDING	SITE 1 FREE FLOW	STANDING	FREE FLOW	STANDING	FREE FLOW	STANDING	FREE FLOW
APR	.270	.110 <T	.120 <T	.080 <T	.	.	.160 <T	.090 <T	.	.
MAY	.270	.090 <T	.100 <T	.070 <T	.	.	.070 <T	.080 <T	.	.
JUN	.260	.050 <T	115	115	.	.	.070 <T	.080 <T	.	.
JUL	.230	.060 <T	.080 <T	.090 <T	.	.	.080 <T	.040 <T	.	.
AUG	.210	.090 <T	.070 <T	.090 <T	.	.	.080 <T	.060 <T	.	.
SEP	.230	.070 <T	.060 <T	.060 <T	.	.	.060 <T	.060 <T	.	.
OCT	.250	.070 <T	.	.	.070 <T	.050 <T	.	.	.070 <T	.070 <T
NOV	.260	.070 <T	.	.	.080 <T	.080 <T	.	.	.050 <T	.070 <T
DEC	.260	.110 <T	.	.	.080 <T	.100 <T	.	.	.090 <T	.120 <T
VANADIUM (UG/L)			DET'N LIMIT = .050		GUIDELINE = 100 (H)					
JAN	.350 <T	.430	.700	.520	.	.	.770	.570	.	.
FEB	.280 <T	.390 <T	.780	.370 <T	.	.	.670	.410	.	.
MAR	.240 <T	.780	.770	115	.	.	.580	.600	.	.
APR	.590	.740	1.100	.660	.	.	.850	.760	.	.
MAY	.420 <T	.860	1.100	.680	.	.	.700	.660	.	.
JUN	.600	.730	115	115	.	.	.770	.880	.	.
JUL	.810	.680	1.200	.710	.	.	.880	.770	.	.
AUG	1.300	1.100	1.200	1.300	.	.	1.200	1.300	.	.
SEP	.890	1.700	1.100	1.200	.	.	1.000	1.100	.	.
OCT	.700	1.000	.	.	1.100	.860	.	.	1.000	.920
NOV	.450 <T	1.200	.	.	1.200	1.100	.	.	.860	.810
DEC	.390 <T	1.200	.	.	.790	.690	.	.	.970	1.100
ZINC (UG/L)			DET'N LIMIT = .001		GUIDELINE = 5000. (A3)					
JAN	3.000	1.100	7.500	2.900	.	.	21.000	1.800	.	.
FEB	3.500	.970 <T	7.300	5.200	.	.	18.000	1.600	.	.
MAR	3.600	1.300	5.600	115	.	.	12.000	1.800	.	.
APR	4.500	1.800	6.900	3.000	.	.	24.000	2.700	.	.
MAY	3.300	1.400	5.000	4.300	.	.	37.000	1.800	.	.

	WATER TREATMENT PLANT		DISTRIBUTION SYSTEM							
SITE TYPE	RAW	TREATED	SITE 1		SITE 3		SITE 2		SITE 4	
			STANDING	FREE FLOW	STANDING	FREE FLOW	STANDING	FREE FLOW	STANDING	FREE FLOW
JUN	2.700	.970 <T	115	115	.	.	12.000	1.500	.	.
JUL	3.600	1.900	8.400	5.300	.	.	11.000	3.600	.	.
AUG	4.300	1.200	22.000	6.700	.	.	3.400	22.000	.	.
SEP	4.200	1.600	13.000	22.000	.	.	15.000	3.400	.	.
OCT	2.900	1.300	.	.	9.000	1.900	.	.	34.000	7.900
NOV	4.000	1.500	.	.	15.000	2.100	.	.	63.000	2.700
DEC	2.700	2.000	.	.	95.000	3.300	.	.	5.900	2.700

	WATER TREATMENT PLANT		DISTRIBUTION SYSTEM							
SITE			SITE 1		SITE 3		SITE 2		SITE 4	
TYPE	RAW	TREATED	STANDING	FREE FLOW	STANDING	FREE FLOW	STANDING	FREE FLOW	STANDING	FREE FLOW
CHLOROAROMATICS										
HEXACHLOROETHANE (NG/L)			DET'N LIMIT = 1.000		GUIDELINE = 1900 (D4)					
JAN	BDL	BDL	.	BDL	.	.	.	BDL	.	.
FEB	BDL	BDL	.	BDL	.	.	.	BDL	.	.
MAR	BDL	BDL	.	BDL	.	.	.	BDL	.	.
APR	ISM	BDL	.	INR	.	.	.	INR	.	.
MAY	BDL	BDL	.	BDL	.	.	.	BDL	.	.
JUN	BDL	BDL	.	BDL	.	.	.	BDL	.	.
JUL	BDL	BDL	.	BDL	.	.	.	BDL	.	.
AUG	BDL	ILA	.	BDL	.	.	.	BDL	.	.
SEP	BDL	BDL	.	BDL	.	.	.	BDL	.	.
OCT	BDL	8.000 <T	.	.	.	BDL	.	.	.	1.000 <T
NOV	BDL	BDL	.	.	.	BDL	.	.	.	BDL
DEC	BDL	BDL	.	.	.	BDL	.	.	.	BDL

	WATER TREATMENT PLANT		DISTRIBUTION SYSTEM							
SITE			SITE 1		SITE 3		SITE 2		SITE 4	
TYPE	RAW	TREATED	STANDING	FREE FLOW	STANDING	FREE FLOW	STANDING	FREE FLOW	STANDING	FREE FLOW
CHLOROPHENOLS										
PENTACHLOROPHENOL (NG/L)			DET'N LIMIT = 50.		GUIDELINE = 60000 (B1)					
JUN	BDL	BDL	.	.	.	.	.	.	.	.
NOV	60.000 <T	BDL	.	.	.	.	.	.	.	.

	WATER TREATMENT PLANT		DISTRIBUTION SYSTEM							
SITE TYPE	RAW	TREATED	SITE 1		SITE 3		SITE 2		SITE 4	
			STANDING	FREE FLOW	STANDING	FREE FLOW	STANDING	FREE FLOW	STANDING	FREE FLOW
PESTICIDES & PCB										
ALPHA BHC (NG/L)			DET'N LIMIT = 1.000		GUIDELINE = 700 (G)					
JAN	1.000 <T	1.000 <T	.	1.000 <T	.	.	.	1.000 <T	.	.
FEB	BDL	1.000 <T	.	BDL	.	.	.	BDL	.	.
MAR	BDL	BDL	.	BDL	.	.	.	1.000 <T	.	.
APR	ISM	BDL	.	INR	.	.	.	INR	.	.
MAY	BDL	2.000 <T	.	1.000 <T	.	.	.	BDL	.	.
JUN	BDL	BDL	.	3.000 <T	.	.	.	BDL	.	.
JUL	BDL	BDL	.	BDL	.	.	.	4.000 <T	.	.
AUG	BDL	TLA	.	BDL	.	.	.	4.000 <T	.	.
SEP	BDL	BDL	.	2.000 <T	.	.	.	BDL	.	.
OCT	BDL	1.000 <T	.	.	.	1.000 <T	.	.	.	BDL
NOV	1.000 <T	2.000 <T	.	.	.	1.000 <T	.	.	.	2.000 <T
DEC	1.000 <T	2.000 <T	.	.	.	2.000 <T	.	.	.	BDL
LINDANE (NG/L)			DET'N LIMIT = 1.000		GUIDELINE = 4000 (A1)					
JAN	BDL	BDL	.	BDL	.	.	.	BDL	.	.
FEB	BDL	BDL	.	BDL	.	.	.	BDL	.	.
MAR	BDL	BDL	.	1.000 <T	.	.	.	BDL	.	.
APR	ISM	BDL	.	INR	.	.	.	INR	.	.
MAY	BDL	BDL	.	BDL	.	.	.	BDL	.	.
JUN	BDL	BDL	.	BDL	.	.	.	BDL	.	.
JUL	BDL	BDL	.	BDL	.	.	.	3.000 <T	.	.
AUG	BDL	TLA	.	BDL	.	.	.	BDL	.	.
SEP	BDL	BDL	.	BDL	.	.	.	BDL	.	.
OCT	BDL	BDL	.	.	.	BDL	.	.	.	BDL
NOV	2.000 <T	2.000 <T	.	.	.	1.000 <T	.	.	.	2.000 <T
DEC	BDL	1.000 <T	.	.	.	BDL	.	.	.	BDL
ATRAZINE (NG/L)			DET'N LIMIT = 50.00		GUIDELINE = 60000 (B3)					
JAN	BDL	BDL	.	BDL	.	.	.	BDL	.	.

	WATER TREATMENT PLANT		DISTRIBUTION SYSTEM							
	SITE TYPE		SITE 1		SITE 3		SITE 2		SITE 4	
	RAW	TREATED	STANDING	FREE FLOW	STANDING	FREE FLOW	STANDING	FREE FLOW	STANDING	FREE FLOW
FEB	NA	NA	-	NA	-	-	-	NA	-	-
MAR	NA	NA	-	NA	-	-	-	NA	-	-
APR	120,000 <1	120,000 <1	-	120,000 <1	-	-	-	120,000 <1	-	-
MAY	NA	NA	-	NA	-	-	-	NA	-	-
JUN	NA	NA	-	NA	-	-	-	NA	-	-
JUL	NA	NA	-	NA	-	-	-	NA	-	-
AUG	NA	NA	-	NA	-	-	-	NA	-	-
SEP	NA	NA	-	NA	-	-	-	-	-	NA
OCT	NA	NA	-	-	-	NA	-	-	-	NA
NOV	NA	NA	-	-	-	NA	-	-	-	NA
DEC	NA	NA	-	-	-	-	-	-	-	-

	WATER TREATMENT PLANT		DISTRIBUTION SYSTEM							
SITE	RAW	TREATED	SITE 1		SITE 3		SITE 2		SITE 4	
TYPE			STANDING	FREE FLOW	STANDING	FREE FLOW	STANDING	FREE FLOW	STANDING	FREE FLOW
PHENOLICS (UG/L)	PHENOLICS 1		DET'N LIMIT = 0.2		GUIDELINE = 2.00 (A3)					
JAN	MDL	1.000 <1	.	.	.	.	.	.	.	.
FEB	.600 <1	MDL	.	.	.	.	.	.	.	.
MAR	MDL	MDL	.	.	.	.	.	.	.	.
APR	MDL	MDL	.	.	.	.	.	.	.	.
MAY	2.200 UCR	2.600 UCR	.	.	.	.	.	.	.	.
JUN	2.800 RVU	2.200 RVU	.	.	.	.	.	.	.	.
JUL	1.600	2.000	.	.	.	.	.	.	.	.
AUG	1.600	2.000	.	.	.	.	.	.	.	.
SEP	1.000 <1	1.000 <1	.	.	.	.	.	.	.	.
OCT	5.000	2.600	.	.	.	.	.	.	.	.
NOV	2.800	2.400	.	.	.	.	.	.	.	.
DEC	2.000	1.600	.	.	.	.	.	.	.	.

	WATER TREATMENT PLANT		DISTRIBUTION SYSTEM							
	SITE		SITE 1		SITE 3		SITE 2		SITE 4	
	TYPE	RAW	TREATED	STANDING	FREE FLOW	STANDING	FREE FLOW	STANDING	FREE FLOW	STANDING	FREE FLOW
	VOLATILES										
BENZENE (UG/L)			DET'N LIMIT = .050		GUIDELINE = 5.0 (81)						
JAN		.	.	.	BDL	.	.	.	BDL	.	.
APR		BDL	BDL	.	BDL	.	.	.	BDL	.	.
MAY		BDL	BDL	.	BDL	.	.	.	BDL	.	.
JUN		BDL	BDL	.	BDL	.	.	.	BDL	.	.
JUL		BDL	BDL	.	BDL	.	.	.	BDL	.	.
AUG		.050 <1	BDL	.	BDL	.	.	.	BDL	.	.
SEP		BDL	BDL	.	BDL	.	.	.	.	.	BDL
OCT		BDL	BDL	.	.	.	BDL	.	.	.	BDL
NOV		BDL	BDL	.	.	.	BDL	.	.	.	BDL
DEC		BDL	BDL	.	.	.	BDL	.	.	.	BDL
TOLUENE (UG/L)			DET'N LIMIT = .050		GUIDELINE = 24.0 (84)						
JAN		.	.	.	BDL	.	.	.	BDL	.	.
APR		BDL	BDL	.	BDL	.	.	.	BDL	.	.
MAY		BDL	BDL	.	.050 <1	.	.	.	.050 <1	.	.
JUN		BDL	BDL	.	BDL	.	.	.	BDL	.	.
JUL		187	.100 <1	.	.150 <1	.	.	.	.150 <1	.	.
AUG		BDL	.050 <1	.	BDL	.	.	.	.050 <1	.	.
SEP		BDL	BDL	.	BDL	.	.	.	BDL	.	.
OCT		BDL	BDL	.	.	.	BDL	.	.	.	BDL
NOV		BDL	.050 <1	.	.	.	BDL	.	.	.	BDL
DEC		BDL	BDL	.	.	.	BDL	.	.	.	BDL
ETHYLBENZENE (UG/L)			DET'N LIMIT = .050		GUIDELINE = 2.4 (84)						
JAN		.	.	.	BDL	.	.	.	BDL	.	.
APR		BDL	.050 <1	.	BDL	.	.	.	BDL	.	.
MAY		BDL	.100 <1	.	BDL	.	.	.	BDL	.	.
JUN		BDL	.050 <1	.	BDL	.	.	.	BDL	.	.

	WATER TREATMENT PLANT		DISTRIBUTION SYSTEM							
SITE TYPE	RAW	TREATED	SITE 1		SITE 3		SITE 2		SITE 4	
			STANDING	FREE FLOW	STANDING	FREE FLOW	STANDING	FREE FLOW	STANDING	FREE FLOW
JUL	1BT	.150 <T	.	.100 <T	.	.	.	.300 <T	.	.
AUG	BDL	.100 <T	.	.150 <T	.	.	.	BDL	.	.
SEP	BDL	BDL	.	BDL	.	.	.	BDL	.	.
OCT	BDL	.100 <T	.	.	.	.100 <T	.	.	.	.200 <T
NOV	.050 <T	.100 <T	.	.	.	BDL	.	.	.	BDL
DEC	BDL	BDL	.	.	.	BDL	.	.	.	BDL
M-XYLENE (UG/L)			DET'N LIMIT = .100		GUIDELINE = 300 (84)					
JAN	.	.	.	BDL	.	.	.	BDL	.	.
APR	BDL	BDL	.	BDL	.	.	.	BDL	.	.
MAY	BDL	BDL	.	BDL	.	.	.	BDL	.	.
JUN	BDL	BDL	.	BDL	.	.	.	BDL	.	.
JUL	1BT	BDL	.	BDL	.	.	.	.900 <T	.	.
AUG	BDL	.100 <T	.	.100 <T	.	.	.	BDL	.	.
SEP	BDL	BDL	.	BDL	.	.	.	BDL	.	.
OCT	BDL	BDL	.	.	.	BDL	.	.	.	BDL
NOV	BDL	BDL	.	.	.	BDL	.	.	.	BDL
DEC	BDL	BDL	.	.	.	BDL	.	.	.	BDL
O-XYLENE (UG/L)			DET'N LIMIT = .050		GUIDELINE = 300 (84)					
JAN	.	.	.	BDL	.	.	.	BDL	.	.
APR	BDL	BDL	.	BDL	.	.	.	BDL	.	.
MAY	BDL	BDL	.	BDL	.	.	.	BDL	.	.
JUN	BDL	BDL	.	BDL	.	.	.	BDL	.	.
JUL	1BT	.050 <T	.	BDL	.	.	.	.450 <T	.	.
AUG	.050 <T	.100 <T	.	BDL	.	.	.	BDL	.	.
SEP	BDL	BDL	.	BDL	.	.	.	BDL	.	.
OCT	BDL	BDL	.	.	.	BDL	.	.	.	BDL
NOV	BDL	BDL	.	.	.	BDL	.	.	.	BDL
DEC	BDL	BDL	.	.	.	BDL	.	.	.	BDL

	WATER TREATMENT PLANT		DISTRIBUTION SYSTEM							
SITE TYPE	RAW	TREATED	SITE 1		SITE 3		SITE 2		SITE 4	
			STANDING	FREE FLOW	STANDING	FREE FLOW	STANDING	FREE FLOW	STANDING	FREE FLOW
STYRENE (UG/L)			DET'N LIMIT = .050		GUIDELINE = 46.5 (D2)					
OCT	BDL	BDL	.	.	.	.500	.	.	.	.900
NOV	.400 <T	.050 <T	.	.	.	.200 <T	.	.	.	.200 <T
DEC	BDL	BDL	.	.	.	.200 <T	.	.	.	BDL
1,1 DICHLOROETHANE (UG/L)			DET'N LIMIT = .100		GUIDELINE = N/A					
JAN	.	.	.	BDL	.	.	.	BDL	.	.
APR	BDL	BDL	.	BDL	.	.	.	BDL	.	.
MAY	BDL	BDL	.	.100 <T	.	.	.	BDL	.	.
JUN	BDL	BDL	.	BDL	.	.	.	BDL	.	.
JUL	TBT	BDL	.	BDL	.	.	.	BDL	.	.
AUG	BDL	BDL	.	BDL	.	.	.	BDL	.	.
SEP	BDL	BDL	.	BDL	.	.	.	BDL	.	.
OCT	BDL	BDL	.	.	.	BDL	.	.	.	BDL
NOV	BDL	BDL	.	.	.	BDL	.	.	.	BDL
DEC	BDL	BDL	.	.	.	BDL	.	.	.	BDL
CHLOROFORM (UG/L)			DET'N LIMIT = .100		GUIDELINE = 350 (A1*)					
JAN	.	.	.	66.300	.	.	.	61.000	.	.
APR	.200 <T	115.000	.	106.300	.	.	.	85.700	.	.
MAY	2.200	110.000	.	96.000	.	.	.	104.000	.	.
JUN	.400 <T	149.000	.	123.000	.	.	.	122.000	.	.
JUL	TBT	129.000	.	110.000	.	.	.	115.000	.	.
AUG	4.000	158.000	.	120.000	.	.	.	116.000	.	.
SEP	.400 <T	144.000	.	120.700	.	.	.	109.000	.	.
OCT	1.300	123.300	.	.	.	105.000	.	.	.	98.200
NOV	2.300	81.700	.	.	.	74.000	.	.	.	92.000
DEC	.300 <T	106.000	.	.	.	71.300	.	.	.	95.300
111, TRICHLOROETHANE (UG/L)			DET'N LIMIT = .020		GUIDELINE = 200 (D1)					

	WATER TREATMENT PLANT		DISTRIBUTION SYSTEM							
SITE			SITE 1		SITE 3		SITE 2		SITE 4	
TYPE	RAW	TREATED	STANDING	FREE FLOW	STANDING	FREE FLOW	STANDING	FREE FLOW	STANDING	FREE FLOW
JAN	.	.	.	BDL	.	.	.	BDL	.	.
APR	BDL	BDL	.	BDL	.	.	.	BDL	.	.
MAY	BDL	BDL	.	BDL	.	.	.	BDL	.	.
JUN	BDL	BDL	.	BDL	.	.	.	BDL	.	.
JUL	1&T	BDL	.	BDL	.	.	.	BDL	.	.
AUG	BDL	BDL	.	BDL	.	.	.	BDL	.	.
SEP	BDL	BDL	.	BDL	.	.	.	BDL	.	.
OCT	BDL	BDL	.	.	.	BDL	.	.	.	BDL
NOV	.120 <T	BDL	.	.	.	BDL	.	.	.	BDL
DEC	BDL	BDL	.	.	.	BDL	.	.	.	BDL
1,2 DICHLOROETHANE (UG/L)			DET'N LIMIT = .050		GUIDELINE = 5.0 (D1)					
JAN	.	.	.	BDL	.	.	.	BDL	.	.
APR	BDL	BDL	.	BDL	.	.	.	BDL	.	.
MAY	BDL	BDL	.	.150 <T	.	.	.	BDL	.	.
JUN	BDL	BDL	.	BDL	.	.	.	BDL	.	.
JUL	1&T	.850 <T	.	.300 <T	.	.	.	.250 <T	.	.
AUG	BDL	BDL	.	BDL	.	.	.	BDL	.	.
SEP	BDL	BDL	.	BDL	.	.	.	BDL	.	.
OCT	BDL	BDL	.	.	.	BDL	.	.	.	BDL
NOV	BDL	BDL	.	.	.	BDL	.	.	.	BDL
DEC	BDL	BDL	.	.	.	BDL	.	.	.	BDL
DICHLOROBROMOMETHANE (UG/L)			DET'N LIMIT = .050		GUIDELINE = 350 (AI+)					
JAN	.	.	.	6.400	.	.	.	5.900	.	.
APR	BDL	6.900	.	5.500	.	.	.	5.050	.	.
MAY	.300 <T	6.500	.	5.100	.	.	.	5.500	.	.
JUN	BDL	8.050	.	7.100	.	.	.	7.650	.	.
JUL	1&T	9.350	.	7.900	.	.	.	9.150	.	.
AUG	.500	15.200	.	10.650	.	.	.	12.350	.	.

	WATER TREATMENT PLANT		DISTRIBUTION SYSTEM							
SITE			SITE 1		SITE 3		SITE 2		SITE 4	
TYPE	RAW	TREATED	STANDING	FREE FLOW	STANDING	FREE FLOW	STANDING	FREE FLOW	STANDING	FREE FLOW
SEP	BDL	13.100	.	11.800	.	.	.	11.700	.	.
OCT	.200 <T	12.700	.	.	.	11.450	.	.	.	10.850
NOV	.300 <T	9.500	.	.	.	7.800	.	.	.	9.150
DEC	BDL	8.600	.	.	.	6.050	.	.	.	7.300
CHLORODIBROMOMETHANE (UG/L)			DET'N LIMIT = .100		GUIDELINE = 350 (A1+)					
JAN	.	.	.	BDL	.	.	.	BDL	.	.
APR	BDL	.300 <T	.	.300 <T	.	.	.	.300 <T	.	.
MAY	.100 <T	.200 <T	.	BDL	.	.	.	.600 <T	.	.
JUN	BDL	.200 <T	.	.100 <T	.	.	.	.100 <T	.	.
JUL	TBT	.300 <T	.	.900 <T	.	.	.	.500 <T	.	.
AUG	BDL	.700 <T	.	.400 <T	.	.	.	.600 <T	.	.
SEP	BDL	.500 <T	.	.600 <T	.	.	.	.600 <T	.	.
OCT	BDL	.500 <T	.	.	.	.600 <T	.	.	.	.500 <T
NOV	BDL	BDL	.	.	.	BDL	.	.	.	.600 <T
DEC	BDL	.400 <T	.	.	.	.300 <T	.	.	.	1.100
T-CHLOROETHYLENE (UG/L)			DET'N LIMIT = .050		GUIDELINE = 10.0 (C2)					
JAN	.	.	.	BDL	.	.	.	BDL	.	.
APR	BDL	BDL	.	BDL	.	.	.	BDL	.	.
MAY	BDL	BDL	.	BDL	.	.	.	BDL	.	.
JUN	BDL	BDL	.	BDL	.	.	.	BDL	.	.
JUL	TBT	BDL	.	BDL	.	.	.	.100 <T	.	.
AUG	BDL	BDL	.	BDL	.	.	.	BDL	.	.
SEP	BDL	BDL	.	BDL	.	.	.	BDL	.	.
OCT	BDL	BDL	.	.	.	BDL	.	.	.	BDL
NOV	BDL	.050 <T	.	.	.	.050 <T	.	.	.	BDL
DEC	BDL	BDL	.	.	.	BDL	.	.	.	.100 <T
TOTL TRIHALOMETHANES (UG/L)			DET'N LIMIT = .500		GUIDELINE = 350 (A1)					

	WATER TREATMENT PLANT		DISTRIBUTION SYSTEM							
SITE TYPE	RAW	TREATED	SITE 1		SITE 3		SITE 2		SITE 4	
			STANDING	FREE FLOW	STANDING	FREE FLOW	STANDING	FREE FLOW	STANDING	FREE FLOW
JAN	.	.	.	72.700	.	.	.	66.900	.	.
APR	BDL	122.200	.	112.100	.	.	.	91.050	.	.
MAY	2.600 <T	116.500	.	101.100	.	.	.	110.100	.	.
JUN	BDL	157.250	.	130.200	.	.	.	129.750	.	.
JUL	TBT	138.650	.	118.800	.	.	.	122.600	.	.
AUG	4.500 <T	173.900	.	131.050	.	.	.	128.950	.	.
SEP	BDL	157.600	.	133.100	.	.	.	121.300	.	.
OCT	1.500 <T	136.500	.	.	.	115.050	.	.	.	109.550
NOV	2.600 <T	91.200	.	.	.	81.800	.	.	.	101.750
DEC	BDL	115.000	.	.	.	77.650	.	.	.	101.700

Table 6

SCAN/PARAMETER	UNIT	DETECTION LIMIT	GUIDELINE
BACTERIOLOGICAL			
STANDARD PLATE COUNT MEMBRANE FILTRATION	CT/ML	0	500/ML(A1)
P/A BOTTLE		0	0 (A1*)
TOTAL COLIFORM MEMBRANE FILTRATION	CT/100ML	0	5/100mL(A1)
TOTAL COLIFORM BACKGROUND MF	CT/100ML	0	N/A
CHLOROAROMATICS			
HEXACHLOROBUTADIENE	NG/L	1.000	450. (D4)
1,2,3-TRICHLOROBENZENE	NG/L	5.000	10000 (I)
1,2,3,4-TETRACHLOROBENZENE	NG/L	1.000	10000 (I)
1,2,3,5-TETRACHLOROBENZENE	NG/L	1.000	10000 (I)
1,2,4-TRICHLOROBENZENE	NG/L	5.000	10000 (I)
1,2,4,5-TETRACHLOROBENZENE	NG/L	1.000	38000 (D4)
1,3,5-TRICHLOROBENZENE	NG/L	5.000	10000 (D4)
HEXACHLOROBENZENE	NG/L	1.0	10. (C1)
HEXACHLOROETHANE	NG/L	1.000	1900. (D4)
OCTACHLOROSTYRENE	NG/L	1.000	N/A
PENTACHLOROBENZENE	NG/L	1.000	74000 (D4)
2,3,6-TRICHLOROTOLUENE	NG/L	5.000	N/A
2,4,5-TRICHLOROTOLUENE	NG/L	5.000	N/A
2,6,A-TRICHLOROTOLUENE	NG/L	5.000	N/A
CHLOROPHENOLS			
2,3,4-TRICHLOROPHENOL	NG/L	50.	N/A
2,3,4,5-TETRACHLOROPHENOL	NG/L	50.	N/A
2,3,5,6-TETRACHLOROPHENOL	NG/L	50.	N/A
2,4,5-TRICHLOROPHENOL	NG/L	50.	2600000 (D4)
2,4,6-TRICHLOROPHENOL	NG/L	50.	5000. (B1)
PENTACHLOROPHENOL	NG/L	50.	60000. (B1)
CHEMISTRY (FLD)			
FIELD COMBINED CHLORINE RESIDUAL	MG/L	N/A	N/A
FIELD FREE CHLORINE RESIDUAL	MG/L	N/A	N/A
FIELD TOTAL CHLORINE RESIDUAL	MG/L	N/A	N/A
FIELD PH	DMSNLESS	N/A	6.5-8.5(A4)
FIELD TEMPERATURE	°C	N/A	<15 °C(A1)
FIELD TURBIDITY	FTU	N/A	1.0 (A1)
CHEMISTRY (LAB)			
ALKALINITY	MG/L	.200	30-500(A4)
CALCIUM	MG/L	.100	100. (F2)
CYANIDE	MG/L	.001	.20(A1)
CHLORIDE	MG/L	.200	250. (A3)
COLOUR	TCU	.5	5.0 (A3)
CONDUCTIVITY	UMHO/CM	1.	400. (F2)
FLUORIDE	MG/L	.01	2.4 (A1)
HARDNESS	MG/L	.50	80-100(A4)
MAGNESIUM	MG/L	.05	30. (F2)
SODIUM	MG/L	.20	200. (C3)
AMMONIUM TOTAL	MG/L	.002	.05(F2)
NITRITE	MG/L	.001	1.0 (A1)
TOTAL NITRATES	MG/L	.02	10. (A1)
NITROGEN TOTAL KJELDAHL	MG/L	.02	N/A
PH	DMSNLESS	N/A	6.5-8.5(A4)
PHOSPHORUS FIL REACT	MG/L	.0005	N/A
PHOSPHORUS TOTAL	MG/L	.002	.40(F2)
TOTAL SOLIDS	MG/L	1.	500. (A3)
TURBIDITY	FTU	.02	1.0 (A1)
METALS			
ALUMINUM	UG/L	.050	100. (A4)

SCAN/PARAMETER	UNIT	DETECTION LIMIT	GUIDELINE
BERYLLIUM	UG/L	.010	0.20 (H)
CADMIUM	UG/L	.050	5.0 (A1)
COBALT	UG/L	.020	1000. (H)
CHROMIUM	UG/L	.100	50. (A1)
COPPER	UG/L	.100	1000. (A3)
IRON	UG/L	4.0	300. (A3)
MERCURY	UG/L	.01	1.0 (A1)
MANGANESE	UG/L	.050	50. (A3)
MOLYBDENUM	UG/L	.020	500. (H)
NICKEL	UG/L	.100	50. (F3)
LEAD	UG/L	.050	50. (A1)
SELENIUM	UG/L	.200	10. (A1)
SILVER	UG/L	.020	50. (A1)
STRONTIUM	UG/L	.050	2000. (H)
THALLIUM	UG/L	.010	13. (D4)
TITANIUM	UG/L	.050	N/A
URANIUM	UG/L	.020	20. (A2)
VANADIUM	UG/L	.050	100. (H)
ZINC	UG/L	.020	500. (A3)
PHENOLICS			
PHENOLICS (UNFILTERED REACTIVE)	UG/L	.2	2.0 (A3)
PESTICIDES & PCB			
ALDRIN	NG/L	1.0	700. (A1)
AMETRINE	NG/L	50.	300000. (D3)
ATRAZINE	NG/L	50.	60000. (B3)
ALPHA HEXACHLOROCYCLOHEXANE (BHC)	NG/L	1.0	700. (G)
BETA HEXACHLOROCYCLOHEXANE (BHC)	NG/L	1.0	300. (G)
GAMMA HEXACHLOROCYCLOHEXANE(LINDANE)	NG/L	1.0	4000. (A1)
ALPHA CHLORDANE	NG/L	2.0	7000. (A1)
GAMMA CHLORDANE	NG/L	2.0	7000. (A1)
BLADEX	NG/L	100.	10000. (B3)
DIELDRIN	NG/L	2.0	700. (A1)
METHOXYCHLOR	NG/L	5.0	100000. (A1)
ENDOSULFAN 1 (THIODAN I)	NG/L	2.0	74000. (D4)
ENDOSULFAN 2 (THIODAN II)	NG/L	4.0	74000. (D4)
ENDRIN	NG/L	4.0	200. (A1)
ENDOSULFAN SULPHATE(THIODAN SULPHATE)	NG/L	4.0	N/A
HEPTACHLOR EPOXIDE	NG/L	1.0	3000. (A1)
HEPTACHLOR	NG/L	1.0	3000. (A1)
METOLACHLOR	NG/L	500.	50000. (B3)
MIREX	NG/L	5.0	N/A
OXYCHLORDANE	NG/L	2.0	N/A
O,P-DDT	NG/L	5.0	30000. (A1)
PCB	NG/L	20.0	3000. (A2)
O,P-DDD	NG/L	5.0	N/A
PPDDE	NG/L	1.0	30000. (A1)
PPDDT	NG/L	5.0	30000. (A1)
ATRATONE	NG/L	50.	N/A
ALACHLOR	NG/L	500.	35000. (D2)
PROMETONE	NG/L	50.	52500. (D3)
PROPAZINE	NG/L	50.	16000. (D2)
PROMETRYNE	NG/L	50.	1000. (B3)
SENCOR (METRIBUZIN)	NG/L	100.	80000. (B2)
SIMAZINE	NG/L	50.	10000. (B3)
POLYAROMATIC HYDROCARBONS			
PHENANTHRENE	NG/L	10.0	N/A
ANTHRACENE	NG/L	1.0	N/A
FLUORANTHENE	NG/L	20.0	42000. (D4)
PYRENE	NG/L	20.0	N/A
BENZO(A)ANTHRACENE	NG/L	20.0	N/A
CHRYSENE	NG/L	50.0	N/A
DIMETHYL BENZO(A)ANTHRACENE	NG/L	5.0	N/A
BENZO(E)PYRENE	NG/L	50.0	N/A
BENZO(B)FLUORANTHENE	NG/L	10.0	N/A
PERYLENE	NG/L	10.0	N/A
BENZO(K)FLUORANTHENE	NG/L	1.0	N/A
BENZO(A)PYRENE	NG/L	5.0	10. (B1)
BENZO(G,H,I)PERYLENE	NG/L	20.0	N/A

SCAN/PARAMETER	UNIT	DETECTION LIMIT	GUIDELINE	
DIBENZO(A,H)ANTHRACENE	NG/L	10.0	N/A	
INDENO(1,2,3-C,D)PYRENE	NG/L	20.0	N/A	
BENZO(B)CHRYSENE	NG/L	2.0	N/A	
CORONENE	NG/L	10.0	N/A	
SPECIFIC PESTICIDES				
TOXAPHENE	NG/L	N/A	5000.	(A1)
2,4,5-TRICHLOROBUTYRIC ACID (2,4,5-T)	NG/L	50.	280000.	(B1)
2,4-DICHLOROBUTYRIC ACID (2,4-D)	NG/L	100.	100000.	(A1)
2,4-DICHLORORPHENOXYBUTYRIC ACID	NG/L	200.	18000.	(B3)
2,4-D PROPIONIC ACID	NG/L	100.	N/A	
DICAMBA	NG/L	100.	87000.	(B3)
PICHLORAM	NG/L	100.	2450000.	(D3)
SILVEX (2,4,5-TP)	NG/L	50.	10000.	(A1)
DIAZINON	NG/L	20.	14000.	(A1)
DICHLOROVOS	NG/L	20.	N/A	
DURSBAN	NG/L	20.	N/A	
ETHION	NG/L	20.	35000.	(G)
GUTHION	NG/L	N/A	N/A	
MALATHION	NG/L	20.	160000.	(G)
MEVINPHOS	NG/L	20.	N/A	
METHYL PARATHION	NG/L	50.	7000.	(B3)
METHYLTRITHION	NG/L	20.	N/A	
PARATHION	NG/L	20.	35000.	(B1)
PHORATE (THIMET)	NG/L	20.	35.	(D2)
RELDAN	NG/L	20.	N/A	
RONNEL	NG/L	20.	N/A	
AMINOCARB	NG/L	N/A	N/A	
BENONYL	NG/L	N/A	N/A	
BUX (METALKAMATE)	NG/L	2000.	N/A	
CARBOFURAN	NG/L	2000.	18000.	(D3)
CICP (CHLORPROPHAM)	NG/L	2000.	350000.	(G)
DIALLATE	NG/L	2000.	30000.	(H)
EPTAM	NG/L	2000.	N/A	
IPC	NG/L	2000.	N/A	
PROPOXUR (BAYGON)	NG/L	2000.	90000.	(G)
SEVIN (CARBARYL)	NG/L	200.	70000.	(A1)
SUTAN (BUTYLATE)	NG/L	2000.	245000.	(D3)
VOLATILES				
BENZENE	UG/L	.050	5.0	(B1)
TOLUENE	UG/L	.050	24.0	(B4)
ETHYLBENZENE	UG/L	.050	2.4	(B4)
PARA-XYLENE	UG/L	.100	300.	(B4)
META-XYLENE	UG/L	.100	300.	(B4)
ORTHO-XYLENE	UG/L	.050	300.	(B4)
1,1-DICHLOROETHYLENE	UG/L	.100	7.0	(D1)
ETHLYENE DIBROMIDE	UG/L	.05	50.	(G)
METHYLENE CHLORIDE	UG/L	.500	1750.	(D3)
TRANS-1,2-DICHLOROETHYLENE	UG/L	.100	350.	(D3)
1,1-DICHLOROETHANE	UG/L	.100	N/A	
CHLOROFORM	UG/L	.100	350.	(A1+)
1,1,1-TRICHLOROETHANE	UG/L	.020	200.	(D1)
1,2-DICHLOROETHANE	UG/L	.050	5.0	(D1)
CARBON TETRACHLORIDE	UG/L	.200	5.0	(D1)
1,2-DICHLOROPROPANE	UG/L	.050	10.0	(G)
TRICHLOROETHYLENE	UG/L	.100	5.0	(D1)
DICHLOROBROMOMETHANE	UG/L	.050	350.	(A1+)
1,1,2-TRICHLOROETHANE	UG/L	.050	.60	(D4)
CHLORODIBROMOMETHANE	UG/L	.100	350.	(A1+)
TETRACHLOROETHYLENE	UG/L	.050	10.0	(C2)
BROMOFORM	UG/L	.200	350.	(A1+)
1,1,2,2-TETRACHLOROETHANE	UG/L	.050	0.17	(D4)
CHLOROBENZENE	UG/L	.100	1510.	(D3)
1,4-DICHLOROBENZENE	UG/L	.100	5.0	(B1)
1,3-DICHLOROBENZENE	UG/L	.100	130.	(G)
1,2-DICHLOROBENZENE	UG/L	.050	200.	(B1)
TRIFLUOROCHLOROTOLUENE	UG/L	.100	N/A	
TOTAL TRIHALOMETHANES	UG/L	.500	350.	(A1)
STYRENE	UG/L	.05	46.5	(D2)